=> d que 11

L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS

=> d ibib ed abs ind l1
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:902144 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 141:370240

TITLE: Transfer-resistant cosmetic compositions containing

hydrophilic polymers and glycerols and volatile

solvent

INVENTOR(S): Bekele, Haimanot; Deckner, George Endel

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT				KIN	D	DATE					ION 1			D.	ATE	
	2004				A1		2004	1028							2	0040	414
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	HU,	IE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
		TD,	ΤG														
US	2005	0192	98		A1		2005	0127		US 2	004-	8242	98		2	0040	414 <
CN	1774	233			Α		2006	0517		CN 2	004-	8001	0166		2	0040	414
EP	1691	778			A1		2006	0823		EP 2	004-	7595	90		2	0040	414
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
JP	2006	5236	18		Τ		2006	1019		JP 2	006-	5012	81		2	0040	414
PRIORIT	Y APP	LN.	INFO	.:						US 2	003-	4628	64P		P 2	0030	414
										WO 2	004-	US11	977	1	W 2	0040	414

ED Entered STN: 28 Oct 2004

AB The cosmetic compns. of the present invention provide a durable film after application that resists degradation over time. Cosmetic compns. of the present invention comprise: polymers selected from the group consisting of hydrophilic copolymers and terpolymers; and Glycerols selected from the group consisting of glycerol, modified glycerols, and mixts. thereof; and a polar volatile solvent. For example, a lip color contained copolymer of 4-Hydroxybutyl acrylate and 2-hydroxyethyl methacrylate 10.0, silk mica 2.64, propylparaben 0.2, Salcare SC95 0.99, ethosperse 8.0, ethanol 21.84% and related coloring material and water.

IC ICM A61K007-025 ICS A61K007-027

- 10/824,298 CC 62-4 (Essential Oils and Cosmetics) Section cross-reference(s): 35 ST cosmetic film hydrophilic polymer glycerol volatile solvent; Hydroxybutyl acrylate hydroxyethyl methacrylate copolymer propylparaben Salcare Ethosperse lipcolor ΙT Polysiloxanes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (amino; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) Polysiloxanes, biological studies ΙT RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (carboxy; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) Polymers, biological studies ΙT RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (co-; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents) ΙT Cosmetics (emollients; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) ΙT Polysiloxanes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (epoxy; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) Polysiloxanes, biological studies ΙT RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (fluoro; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) Ethers, biological studies ΙT RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (glyceryl; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents) ΙT Cosmetics (lipsticks; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents) Epoxy resins, biological studies ΙT RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (polysiloxane-; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) ΙT Polymers, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (terpolymers; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents) ΙT (transfer-resistant cosmetic films containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) ΙT Polyoxyalkylenes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents) ΙT (transfer-resistant lip cosmetics containing hydrophilic polymers and glycerols and volatile solvents and topcoat silicones) ΙT Fats and Glyceridic oils, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (vegetable; transfer-resistant cosmetics containing hydrophilic polymers
 - 13463-67-7, Titania, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (anatase; transfer-resistant cosmetics containing hydrophilic polymers and

and glycerols and vegetable oils)

ΙT

glycerols and volatile solvents)

8

IT 9003-01-4D, Polyacrylic acid, derivs.

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(cationic; transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents)

IT 56-81-5, Glycerol, biological studies 56-81-5D, Glycerol, derivs.

64-17-5, Ethanol, biological studies 94-13-3, Propyl paraben

25322-68-3D, PEG, alkyl derivs. 26161-33-1, Salcare SC-95 39990-17-5,

 $\hbox{$4-$Hydroxybutyl acrylate-$2-$hydroxyethyl methacrylate copolymer}$

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d que 12

L2 1 SEA FILE=WPIX ABB=ON PLU=ON US2004-824298/APPS

=> d iall code 12

YOU HAVE REQUESTED DATA FROM FILE 'WPIX' - CONTINUE? (Y)/N:y

L2 ANSWER 1 OF 1 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-766705 [75] WPIX

DOC. NO. CPI: C2004-268818 [75]

TITLE: Cosmetic composition useful as transfer-resistant

cosmetic composition e.g. lip products comprises
hydrophilic copolymer or terpolymer; glycerol and/or

modified glycerols and polar volatile solvent

DERWENT CLASS: A14; A96; D21; E17

INVENTOR: BEKELE H; DECKNER G E; DECKNER G PATENT ASSIGNEE: (PROC-C) PROCTER & GAMBLE CO

COUNTRY COUNT: 107

PATENT INFORMATION:

PAT	CENT NO	KINI	DATE	WEEK	LA	PG	MAIN IPC
 WO	2004091561	 Д1	20041028	(200475)*	EN	 17[0]	
	20050019298			(200509)		I,[0]	
MX	2005011014	A1	20051201	(200629)	ES		
EP	1691778	A1	20060823	(200655)	EN		
CN	1774233	Α	20060517	(200663)	ZH		
JΡ	2006523618	W	20061019	(200669)	JA	14	

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
WO 2004091561 A1	WO 2004-US11977 20040414
US 20050019298 A1 Provisional	US 2003-462864P 20030414
CN 1774233 A	CN 2004-80010166 20040414
EP 1691778 A1	EP 2004-759590 20040414
US 20050019298 A1	US 2004-824298 20040414
MX 2005011014 A1	WO 2004-US11977 20040414
EP 1691778 A1	WO 2004-US11977 20040414

MX	2005011014	A1	MX	2005-11014 20051013
JP	2006523618	\overline{W}	WO	2004-US11977 20040414
JP	2006523618	\overline{W}	JP	2006-501281 20040414

FILING DETAILS:

BASIC ABSTRACT:

]	PATENT NO		KIN	D		PAT	CENT NO)		
I	MX 20050110	 14	 A1	Based	on	WO	200409	91561	A	
]	EP 1691778		A1	Based	on	WO	200409	91561	A	
	JP 20065236	18	W	Based	on	WO	200409	91561	A	
PRIORI'	TY APPLN. I	NFO:		2003-4628 S 2004-83			30414)040414	1 2		
INT. P	ATENT CLASS	IF.:								
IPC	ORIGINAL:		A61	K0008-30	[I,C];	A61K00	008-34	[I,A];	A61K0008-37	[I,A];
			A61	K0008-39	[I,A];	A61K00	008-72	[I,A];	A61K0008-72	[I,C];
			A61	K0008-72	[I,C];	A61K00	008-81	[I,A];	A61K0008-81	[I,A];
			A61	Q0001-02	[I,C];	A61Q00	001-04	[I,A]		
IPC R	ECLASSIF.:		A61	K0008-30	[I,C];	A61K00	008-34	[I,A];	A61K0008-37	[I,A];
			A61	K0008-39	[I,A];	A61K00	008-72	[I,C];	A61K0008-81	[I,A];
			A61	Q0001-02	[I,C];	A61Q00	01-04	[I,A]		
ECLA:			A61	K0008-34I); A61K	0008-35	7C; A61	LK0008-3	39; A61K0008-	-81K4;
			A61	Q0001-04						
USCLAS	S NCLM:		424	/070.160						

WO 2004091561 A1 UPAB: 20050707

NOVELTY - A cosmetic composition (C1) comprises polymers selected from hydrophilic copolymer and terpolymer; glycerols selected from glycerol and/or modified glycerols and polar volatile solvent.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) lip cosmetic kit comprising (C1) and a complimentary product (C2) comprising a topcoat composition that comprises a polymeric vegetable oil emollient or silicone modified fluorinated polymers;
 - (2) a method of applying the composition to lips; and
 - (3) lip cosmetic kits.

 \mbox{USE} - As transfer-resistant cosmetic composition, particularly as lip products.

ADVANTAGE - The composition not only provides profound film resistant to transfer upon contact with objects such as clothing, towels, cups, handkerchiefs and tissues thought the day, but also provides the qualities to maintaining a freshly applied, consistent look with additional appearance benefits such as gloss and shine. Complimentary product such as the topcoat composition which is applied over the dried film provides the user with an aesthetically pleasing affect and does not significantly disrupt the composition of the present invention. MANUAL CODE:

CPI: A10-E01; A12-V04; D08-B01; E10-E04G; E10-E04H;

```
E10-E04K; E10-G02G2
```

```
ΑN
     2004-766705 [75]
                       WPIX
     A14; A96; D21; E17
IPCI A61K0008-30 [I,C]; A61K0008-34 [I,A]; A61K0008-37 [I,A]; A61K0008-39
     [I,A]; A61K0008-72 [I,A]; A61K0008-72 [I,C]; A61K0008-72 [I,C];
     A61K0008-81 [I,A]; A61K0008-81 [I,A]; A61Q0001-02 [I,C]; A61Q0001-04 [I,A]
IPCR A61K0008-30 [I,C]; A61K0008-34 [I,A]; A61K0008-37 [I,A]; A61K0008-39
     [I,A]; A61K0008-72 [I,C]; A61K0008-81 [I,A]; A61Q0001-02 [I,C];
     A61Q0001-04 [I,A]
EPC A61K0008-34D; A61K0008-37C; A61K0008-39; A61K0008-81K4; A61Q0001-04
NCL NCLM 424/070.160
     CPI: A10-E01; A12-V04; D08-B01; E10-E04G; E10-E04H; E10-E04K; E10-G02G2
MC
PLE UPA 20050707
              2004 H0022 H0011; H0033 H0011;
     [1.1]
```

- [1.2] 2004 G0373 G0340 G0339 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D63 F41 F89 D11 D87 F27 F26; G0408 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D86 F27 F26 F41 F89 DCN: R01463 DCR: 10240; H0022 H0011; P0088;
- 2004 ND01; Q9999 Q9165-R; Q9999 Q9176 Q9165; [1.3]
- [1.4]2004 B9999 B3407 B3383 B3372; B9999 B5618 B5572;
- [2.1] 2004 G0260-R G0022 D01 D12 D10 D26 D51 D53; H0000; H0011-R; K9643 K9621; P0088;
- 2004 ND01; Q9999 Q9165-R; Q9999 Q9176 Q9165; [2.2]
- 2004 09999 09347; [2.3]
- 2004 G2186-R D01; H0000; H0011-R; [3.1]
- 2004 F- 7A; P1445-R F81 Si 4A; M9999 M2391; [3.2]
- [3.3] 2004 P1445-R F81 Si 4A; M9999 M2039; M9999 M2062; M9999 M2175;
- 2004 ND01; Q9999 Q9165-R; Q9999 Q9176 Q9165; [3.4]
- CMC UPB 20050707
 - DRN: 0113-U
 - DCR: 490-U
 - M3 *01* H4 H403 H483 H8 M280 M313 M321 M332 M343 M383 M391 M416 M620 M781 Q130 Q254 R023 M905 M904 M910
 - DCN: R00113-K R00113-U
 - DCR: 490-K 490-U
 - M423 M781 Q130 Q254 R023 M905 M3 *02*
 - DCN: RAA1GH-K RAA1GH-U
 - DCR: 689051-K 689051-U
 - M3 *03* H4 H403 H483 H5 H582 H584 H8 M280 M312 M313 M321 M322 M323 M332 M342 M343 M383 M393 M416 M620 M781 Q130 Q254 R023 M905 M904 MCN: 0142-98601-K 0142-98601-U
 - J0 J013 J2 J273 M210 M211 M212 M213 M214 M215 M216 M220 M221 M3 *04* M222 M223 M224 M225 M226 M231 M232 M233 M262 M283 M313 M321 M332 M343 M383 M391 M416 M620 M781 O130 O254 R023 M905 M904 MCN: 0142-98602-K 0142-98602-U

=> d ide 16

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

- L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 39990-17-5 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 4-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Propenoic acid, 4-hydroxybutyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI)

OTHER NAMES:

- CN 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer
- MF (C7 H12 O3 . C6 H10 O3) \times
- CI PMS
- PCT Polyacrylic
- LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {}^{\text{H2C}}{}^{\text{C}} \circ \\ {}^{\text{Me}}{}^{\text{C}} \stackrel{\text{C}}{}^{\text{C}} \circ - \circ - \circ + 2 - \circ + 2 - \circ + \\ \end{array}$$

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> => d que	16	
L1	1	SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L3		TRANSFER PLU=ON L1 1- RN: 8 TERMS
L4	8	SEA FILE=REGISTRY ABB=ON PLU=ON L3
L5	14	SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
		O3)X"/MF
L6	1	SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5
=> d que 19		
L1	1	SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L3		TRANSFER PLU=ON L1 1- RN: 8 TERMS
L4	8	SEA FILE=REGISTRY ABB=ON PLU=ON L3
L5	14	SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
		O3)X"/MF
L6	1	SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5
L7	177	SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
		N
L8	177	SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND PMS/CI
L9	177	SEA FILE=REGISTRY ABB=ON PLU=ON L8 OR L6

=> d que stat 115 L11 STR

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE L12 STR

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L13 SCR 2043

L15 414 SEA FILE=REGISTRY SSS FUL (L13 AND L12 AND L11)

100.0% PROCESSED 21976 ITERATIONS 414 ANSWERS

SEARCH TIME: 00.00.01

=> d que 118 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS L1 TRANSFER PLU=ON L1 1- RN: 8 TERMS L3 L48 SEA FILE=REGISTRY ABB=ON PLU=ON L3 L514 SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 03)X"/MF L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5 L7 177 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR 177 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND PMS/CI L8 177 SEA FILE=REGISTRY ABB=ON PLU=ON L8 OR L6 L9

7 0 с-~ 2-~ 3-~ 4н2- 5н2- 6н

NODE ATTRIBUTES:

L11

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

STR

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L12 STR

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L13 SCR 2043

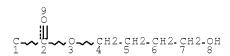
L15 414 SEA FILE=REGISTRY SSS FUL (L13 AND L12 AND L11)
L16 414 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L9 OR L15

```
L17 414 SEA FILE=REGISTRY POLYLINK L16
L18
         414 SEA FILE=REGISTRY ABB=ON PLU=ON (L16 OR L17)
=> d que 119
            1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L3
             TRANSFER PLU=ON L1 1- RN: 8 TERMS
L4
            8 SEA FILE=REGISTRY ABB=ON PLU=ON L3
L19
            2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ("(C3 H4 O2)X" OR
              "(C9 H18 N O2 . CL)X")/MF
=> d que 120
            1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L1
L3
            TRANSFER PLU=ON L1 1- RN: 8 TERMS
L4
            8 SEA FILE=REGISTRY ABB=ON PLU=ON L3
L20
           1 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND "C2 H6 O"/MF
=> d que 121
            1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L1
L3
             TRANSFER PLU=ON L1 1- RN: 8 TERMS
L4
           8 SEA FILE=REGISTRY ABB=ON PLU=ON L3
L21
           1 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND TI/ELS
=> d que 123
L23
           1 SEA FILE=REGISTRY ABB=ON PLU=ON 56-81-5/RN
=> d que 126
            1 SEA FILE=REGISTRY ABB=ON PLU=ON GLYCERETH/CN
L24
            1 SEA FILE=REGISTRY ABB=ON PLU=ON "GLYCERETH 26"/CN OR
L25
              "GLYCERETH 7"/CN
L26
           1 SEA FILE=REGISTRY ABB=ON PLU=ON (L24 OR L25)
=> d que 164
            1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L1
             TRANSFER PLU=ON L1 1- RN: 8 TERMS
L3
L4
            8 SEA FILE=REGISTRY ABB=ON PLU=ON L3
L5
           14 SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
             03)X"/MF
            1 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5
          177 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
L7
          177 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND PMS/CI
         177 SEA FILE=REGISTRY ABB=ON PLU=ON L8 OR L6
L9
L11
              STR
       О--- CH2- CH2- OH
```

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE L12 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

```
STEREO ATTRIBUTES: NONE
L13
              SCR 2043
L15
           414 SEA FILE=REGISTRY SSS FUL (L13 AND L12 AND L11)
          414 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L9 OR L15
L16
          414 SEA FILE=REGISTRY POLYLINK L16
L17
          414 SEA FILE=REGISTRY ABB=ON PLU=ON (L16 OR L17)
L18
              QUE ABB=ON PLU=ON BEKELE, H?/AU
L27
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L28
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS, SO, PA
L29
L52
          244 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
            1 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L27 OR L28 OR L29)
L62
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L62
L63
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L62 OR L63)
L64
```

=> d que 178 L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS L3 TRANSFER PLU=ON L1 1- RN: 8 TERMS 8 SEA FILE=REGISTRY ABB=ON PLU=ON L3 L414 SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 L5 03)X"/MF 1 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5 L6 177 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR L7 177 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND PMS/CI L8 177 SEA FILE=REGISTRY ABB=ON PLU=ON L8 OR L6 L9 L11 STR

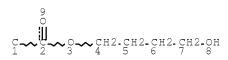
NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE L12 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUT	ES: NONE
L13	SCR 2043
L15 414	SEA FILE=REGISTRY SSS FUL (L13 AND L12 AND L11)
	SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L9 OR L15
L17 414	SEA FILE=REGISTRY POLYLINK L16
	SEA FILE=REGISTRY ABB=ON PLU=ON (L16 OR L17)
	SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ("(C3 H4 O2)X" OR
	"(C9 H18 N O2 . CL)X")/MF
L20 1	SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND "C2 H6 O"/MF
L21 1	SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND TI/ELS
L23 1	SEA FILE=REGISTRY ABB=ON PLU=ON 56-81-5/RN
L24 1	SEA FILE=REGISTRY ABB=ON PLU=ON GLYCERETH/CN
L25 1	SEA FILE=REGISTRY ABB=ON PLU=ON "GLYCERETH 26"/CN OR
	"GLYCERETH 7"/CN
L26 1	SEA FILE=REGISTRY ABB=ON PLU=ON (L24 OR L25)
L27	QUE ABB=ON PLU=ON BEKELE, H?/AU
L28	QUE ABB=ON PLU=ON DECKNER, G?/AU
L29	QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L30	QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
	<2003 OR REVIEW/DT
L31	QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
L32	QUE ABB=ON PLU=ON ?GLYCERYL?(1T)ETHER?
L33	QUE ABB=ON PLU=ON ?GLYCERYL?(3A)ETHER?
L34	QUE ABB=ON PLU=ON POLAR?
L35	QUE ABB=ON PLU=ON WATER OR H2O OR AQ OR AQUEOUS?
L36	QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETO
	H
L37	QUE ABB=ON PLU=ON CATION?
L38	QUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?)
	OR (POLY(1T)?ACRYLAT?)
L39	QUE ABB=ON PLU=ON ETHOXYL?
L40	QUE ABB=ON PLU=ON ?GLYCOL?
L41	QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL
T 40	OR GLYCOL OR TRIOL
L42	QUE ABB=ON PLU=ON ?PIGMENT?

```
L43
                QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMI
                NA OR BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR
                ? OR TITANIUM OR TITANIA OR TITANAT? OR MICA
L44
                QUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HY
                GIEN?
L45
                QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
L46
               QUE ABB=ON PLU=ON COSMETICS
L47
               QUE ABB=ON PLU=ON ETHERS+PFT,OLD,NEW,NT/CT (L)?GLYCERY
               L?
L48
               QUE ABB=ON PLU=ON ?GLYCERETH?
               QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L49
                QUE ABB=ON PLU=ON PIGMENTS+PFT, OLD, NEW, NT/CT
L50
                QUE ABB=ON PLU=ON "PIGMENTS, NONBIOLOGICAL"+PFT, OLD, NE
L51
                W.NT/CT
L52
            244 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
L53
            10 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND ((L19 OR L20 OR L21)
               OR L23 OR L26)
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND COSMET?/SC,SX
L54
              7 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L44 OR L45 OR L46)
L55
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND ((L32 OR L33) OR L47)
L56
            16 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND L38
L57
L58
           112 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L34 OR L35 OR L36)
              2 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND ((L39(4A)L40) OR L48)
L59
             87 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND L41
L60
             70 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L42 OR L43 OR L49 OR
L61
                (L50 OR L51))
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L27 OR L28 OR L29)
L62
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L62
L63
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L62 OR L63)
L64
           243 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 NOT L64
L65
           191 SEA FILE=HCAPLUS ABB=ON PLU=ON L65 AND (L30 OR L31)
144 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND (L53 OR L54 OR L55 OR
L66
L67
                L56 OR L57 OR L58 OR L59 OR L60 OR L61)
              2 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND L6
L68
            90 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND L9
            90 SEA FILE=HCAPLUS ABB=ON PLU=ON (L68 OR L69)
L70
            65 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 AND L70
L71
             5 SEA FILE=HCAPLUS ABB=ON PLU=ON L71 AND (L53 OR L54 OR L55)
0 SEA FILE=HCAPLUS ABB=ON PLU=ON L71 AND L59
L72
L73
             23 SEA FILE=HCAPLUS ABB=ON PLU=ON L71 AND L61
L74
L75
             7 SEA FILE=HCAPLUS ABB=ON PLU=ON L71 AND (L35 AND (L36 OR
                L41))
             30 SEA FILE=HCAPLUS ABB=ON PLU=ON (L72 OR L73 OR L74 OR L75)
L76
             4 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND L37
L77
             30 SEA FILE=HCAPLUS ABB=ON PLU=ON (L76 OR L77)
L78
```

=> d his ful

L1

(FILE 'HOME' ENTERED AT 14:41:38 ON 11 MAR 2008)

FILE 'STNGUIDE' ENTERED AT 14:41:41 ON 11 MAR 2008

FILE 'ZCAPLUS' ENTERED AT 14:41:53 ON 11 MAR 2008 E US2004-824298/APPS

FILE 'HCAPLUS' ENTERED AT 14:42:06 ON 11 MAR 2008 1 SEA ABB=ON PLU=ON US2004-824298/APPS

D SCAN SAVE TEMP L1 PAG298HCAAPP/A

FILE 'STNGUIDE' ENTERED AT 14:43:27 ON 11 MAR 2008
D QUE L1

FILE 'HCAPLUS' ENTERED AT 14:44:04 ON 11 MAR 2008
D IBIB ED ABS IND L1

FILE 'STNGUIDE' ENTERED AT 14:44:05 ON 11 MAR 2008
D QUE L2

FILE 'WPIX' ENTERED AT 14:45:00 ON 11 MAR 2008 D IALL CODE L2

FILE 'STNGUIDE' ENTERED AT 14:45:01 ON 11 MAR 2008

FILE 'REGISTRY' ENTERED AT 14:47:09 ON 11 MAR 2008

FILE 'HCAPLUS' ENTERED AT 14:47:12 ON 11 MAR 2008
L3 TRA PLU=ON L1 1- RN: 8 TERMS

FILE 'REGISTRY' ENTERED AT 14:47:14 ON 11 MAR 2008
L4 8 SEA ABB=ON PLU=ON L3
SAVE TEMP L4 PAG298REGAPP/A
D SCAN

FILE 'STNGUIDE' ENTERED AT 14:48:01 ON 11 MAR 2008

FILE 'STNGUIDE' ENTERED AT 14:53:34 ON 11 MAR 2008 D OUE

FILE 'REGISTRY' ENTERED AT 14:53:47 ON 11 MAR 2008 D IDE L6

FILE 'STNGUIDE' ENTERED AT 14:53:47 ON 11 MAR 2008

FILE 'REGISTRY' ENTERED AT 14:54:35 ON 11 MAR 2008 L7 177 SEA ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CRN

L8 177 SEA ABB=ON PLU=ON L7 AND PMS/CI

L9 177 SEA ABB=ON PLU=ON L8 OR L6 SAVE TEMP L9 PAG298CRNPOL/A

FILE 'STNGUIDE' ENTERED AT 14:55:54 ON 11 MAR 2008

FILE 'LREGISTRY' ENTERED AT 14:55:56 ON 11 MAR 2008

L10 STR L11 STR L10

L12 STR

FILE 'REGISTRY' ENTERED AT 14:58:21 ON 11 MAR 2008

		10/824,298
L13 L14		SCREEN 2043 30 SEA SSS SAM (L13 AND L12 AND L11)
	FILE	'STNGUIDE' ENTERED AT 15:00:12 ON 11 MAR 2008 D QUE STAT
L15	FILE	'REGISTRY' ENTERED AT 15:01:08 ON 11 MAR 2008 414 SEA SSS FUL (L13 AND L12 AND L11) SAVE TEMP L15 PAG298PSET1/A
	FILE	'STNGUIDE' ENTERED AT 15:03:02 ON 11 MAR 2008 D SAVED
L16 L*** L17 L18	DEL	'REGISTRY' ENTERED AT 15:21:10 ON 11 MAR 2008 414 SEA ABB=ON PLU=ON L6 OR L9 OR L15 0 S L16 AND RELATED POLYMERS/FA 414 POLYLINK L16 414 SEA ABB=ON PLU=ON (L16 OR L17) SAVE TEMP L18 PAG298PLX/Z PAG298PLX/A
	FILE	'STNGUIDE' ENTERED AT 15:22:49 ON 11 MAR 2008 D SAVED
	FILE	'REGISTRY' ENTERED AT 15:28:30 ON 11 MAR 2008 D SCAN L4
L19		2 SEA ABB=ON PLU=ON L4 AND ("(C3 H4 O2)X" OR "(C9 H18 N O2 . CL)X")/MF
L20		SAVE TEMP L19 PAG298POLYAC/A 1 SEA ABB=ON PLU=ON L4 AND "C2 H6 O"/MF SAVE TEMP L20 PAG298ETOH/A
L21		1 SEA ABB=ON PLU=ON L4 AND TI/ELS SAVE TEMP L21 PAG298TITAN/A E GLYCERYL ETHER/CN
L22		1 SEA ABB=ON PLU=ON "GLYCERYL IODIDE"/CN D SCAN
L23		1 SEA ABB=ON PLU=ON 56-81-5/RN D SCAN SAVE TEMP L23 PAG298GLYCER/A E GLYCERETH/CN
L24		1 SEA ABB=ON PLU=ON GLYCERETH/CN D SCAN
L25		1 SEA ABB=ON PLU=ON "GLYCERETH 26"/CN OR "GLYCERETH 7"/CN D SCAN
L26		1 SEA ABB=ON PLU=ON (L24 OR L25) SAVE TEMP L26 PAG298GLYETH/A E ALUMINUM LAKE/CN
	FILE	'STNGUIDE' ENTERED AT 15:37:17 ON 11 MAR 2008 D SAVED
L27 L28 L29 L30	FILE	'ZCAPLUS' ENTERED AT 15:38:52 ON 11 MAR 2008 QUE ABB=ON PLU=ON BEKELE, H?/AU QUE ABB=ON PLU=ON DECKNER, G?/AU QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PY<2003 OR MY<2003 OR REVIEW/DT
L31 L*** L32 L33	DEL	QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 QUE ?GLYCERYL?(1T)ETHER QUE ABB=ON PLU=ON ?GLYCERYL?(1T)ETHER? QUE ABB=ON PLU=ON ?GLYCERYL?(3A)ETHER?

```
QUE ABB=ON PLU=ON POLAR?
L34
L35
               QUE ABB=ON PLU=ON WATER OR H2O OR AQ OR AQUEOUS?
L36
               QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETOH
               QUE ABB=ON PLU=ON CATION?
L37
               QUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?) OR
L38
               (POLY(1T)?ACRYLAT?)
L39
               QUE ABB=ON PLU=ON ETHOXYL?
L40
               QUE ABB=ON PLU=ON ?GLYCOL?
               QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL OR
L41
               GLYCOL OR TRIOL
L42
               QUE ABB=ON PLU=ON ?PIGMENT?
               QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMINA OR
L43
               BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR? OR
              TITANIUM OR TITANIA OR TITANAT? OR MICA
L44
              QUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HYGIEN?
L45
              QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
L46
              QUE ABB=ON PLU=ON COSMETICS
              QUE ABB=ON PLU=ON ETHERS+PFT,OLD,NEW,NT/CT (L)?GLYCERYL?
L47
               QUE ABB=ON PLU=ON ?GLYCERETH?
QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L48
L49
               E PIGMENT/CT
               E PIGMENTS
               E PIGMENTS/CT
               E E87+ALL
               QUE ABB=ON PLU=ON PIGMENTS+PFT, OLD, NEW, NT/CT
L50
               QUE ABB=ON PLU=ON "PIGMENTS, NONBIOLOGICAL"+PFT,OLD,NEW,NT/CT
L51
     FILE 'HCAPLUS' ENTERED AT 15:50:07 ON 11 MAR 2008
L52
           244 SEA ABB=ON PLU=ON L18
            10 SEA ABB=ON PLU=ON L52 AND ((L19 OR L20 OR L21) OR L23 OR
L53
               L26)
             3 SEA ABB=ON PLU=ON L52 AND COSMET?/SC,SX
L54
L55
             7 SEA ABB=ON PLU=ON L52 AND (L44 OR L45 OR L46)
L56
            1 SEA ABB=ON PLU=ON L52 AND ((L32 OR L33) OR L47)
            16 SEA ABB=ON PLU=ON L52 AND L38
L57
          112 SEA ABB=ON PLU=ON L52 AND (L34 OR L35 OR L36)
            2 SEA ABB=ON PLU=ON L52 AND ((L39(4A)L40) OR L48)
L59
            87 SEA ABB=ON PLU=ON L52 AND L41
L60
            70 SEA ABB=ON PLU=ON L52 AND (L42 OR L43 OR L49 OR (L50 OR
L61
               L51))
L62
             1 SEA ABB=ON PLU=ON L52 AND (L27 OR L28 OR L29)
             1 SEA ABB=ON PLU=ON L1 AND L62
L63
L64
             1 SEA ABB=ON PLU=ON (L62 OR L63)
               SAVE TEMP L64 PAG298HCAINV/A
           243 SEA ABB=ON PLU=ON L52 NOT L64
L65
           191 SEA ABB=ON PLU=ON L65 AND (L30 OR L31)
144 SEA ABB=ON PLU=ON L66 AND (L53 OR L54 OR L55 OR L56 OR L57
L66
L67
               OR L58 OR L59 OR L60 OR L61)
L68
             2 SEA ABB=ON PLU=ON L66 AND L6
            90 SEA ABB=ON PLU=ON L66 AND L9
L70
           90 SEA ABB=ON PLU=ON (L68 OR L69)
            65 SEA ABB=ON PLU=ON L67 AND L70
L71
            5 SEA ABB=ON PLU=ON L71 AND (L53 OR L54 OR L55)
0 S L72 AND L59
L72
L*** DEL
L*** DEL
            1 S L72 AND (L43 OR L49-L51)
            O SEA ABB=ON PLU=ON L71 AND L59
L73
           23 SEA ABB=ON PLU=ON L71 AND L61
L74
            7 SEA ABB=ON PLU=ON L71 AND (L35 AND (L36 OR L41))
L75
L76
           30 SEA ABB=ON PLU=ON (L72 OR L73 OR L74 OR L75)
```

D SCAN TI HIT

FILE 'STNGUIDE' ENTERED AT 16:03:09 ON 11 MAR 2008 D QUE

FILE 'STNGUIDE' ENTERED AT 16:05:43 ON 11 MAR 2008

FILE 'HCAPLUS' ENTERED AT 16:06:13 ON 11 MAR 2008 SAVE TEMP L78 PAG298HCAB/A

FILE 'STNGUIDE' ENTERED AT 16:06:27 ON 11 MAR 2008

FILE 'STNGUIDE' ENTERED AT 16:28:37 ON 11 MAR 2008

D QUE L6

D QUE L9

D QUE STAT L15

D QUE L18

D QUE L19

D QUE L20

D QUE L21

D QUE L23

D QUE L26 D QUE L64

D OOF TOA

D QUE L78

FILE HOME

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Mar 7, 2008 (20080307/UP).

FILE ZCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS is strictly prohibited.

FILE COVERS 1907 - 11 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 10 Mar 2008 (20080310/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE HCAPLUS

Copyright of the articles to which records in this database refer is

held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 11 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 10 Mar 2008 (20080310/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIX

FILE LAST UPDATED: 10 MAR 2008 <20080310/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200817 <200817/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to the end of
November 2007. No update date (UP) has been created for the
reclassified documents, but they can be identified by
20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and
20071130/UPIC. <<<</pre>

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://scientific.thomson.com/support/patents/coverage/latestupdates/

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0: http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0710.p

- >>> XML document distribution format now available See HELP XMLDOC <<<
- >>> ECLA Codes and Current US National Classifications have been added see NEWS and HELP CHANGE <<<
- >>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<
- >>> Updated PDF files in the following links:
 http://www.stn-international.de/stndatabases/details/ico_0801.zip
 http://www.stn-international.de/stndatabases/details/epc_0801.zip
 Supplement of all changed ECLA items:
 http://www.stn-international.de/stndatabases/details/ecla_0802s.zip <</pre>

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 MAR 2008 HIGHEST RN 1007341-18-5 DICTIONARY FILE UPDATES: 10 MAR 2008 HIGHEST RN 1007341-18-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE LREGISTRY

LREGISTRY IS A STATIC LEARNING FILE

NEW CAS INFORMATION USE POLICIES, ENTER HELP USAGETERMS FOR DETAILS.

=> => d que stat 181	
L24 QUE ABB=ON PLU=ON I	BEKELE, H?/AU
L25 QUE ABB=ON PLU=ON	
·-	(PROCTER OR GAMBLE)/CS,SO,PA
	PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022
OR H0033)/PLE	110 01 101103/111 (1/00302/1111 (1/00022
	PLU=ON L77 AND (L24 OR L25 OR L26)
DOI O DEM LIED WITH MEDD ON	THO ON HIT INVO (HZI ON HZO ON HZO)
=> d que stat 190	
L24 QUE ABB=ON PLU=ON 1	BEKELE, H?/AU
L25 QUE ABB=ON PLU=ON 1	DECKNER, G?/AU
L26 QUE ABB=ON PLU=ON	(PROCTER OR GAMBLE)/CS,SO,PA
L28 QUE ABB=ON PLU=ON A	AY<2003 OR PY<2003 OR PRY<2003
	?GLYCERYL?(1T)ETHER?
***	?GLYCERYL?(3A)ETHER?
· ·	POLAR?
	WATER OR H2O OR AQ OR AQUEOUS?
	ALCOHOL OR ALKANOL OR ETHANOL OR ETO
H	
L34 QUE ABB=ON PLU=ON (CATION?
~	POLYACRYLAT? OR (POLY(1W)?ACRYLAT?)
OR (POLY(1T)?ACRYLAT	
L36 QUE ABB=ON PLU=ON 1	ETHOXYL?
L37 QUE ABB=ON PLU=ON	?GLYCOL?
~	ALCOHOL OR ALKANOL OR DIOL OR POLYOL
OR GLYCOL OR TRIOL	
L39 QUE ABB=ON PLU=ON	
L40 QUE ABB=ON PLU=ON A	AL OR ALUMINUM OR ALUMINIUM OR ALUMI
	CALCIUM OR CA OR IRON OR FE OR FERR
	NIA OR TITANAT? OR MICA
	COSMETIC? OR BEAUT? OR TOILET? OR HY
GIEN?	MAKELID OD (MAKE (II) IID)
	MAKEUP OR (MAKE(W)UP)
~	?GLYCERETH?
~	COLOR? OR COLOUR?
L77 1107 SEA FILE=WPIX ABB=ON OR H0033)/PLE	PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022
• •	(A12-V04 OR D08-B OR B14-R? OR C14-R
?)/MC	,
L79 QUE ABB=ON PLU=ON	(B12-L02 OR C12-L02)/MC
	(A61K0008 OR A61Q?)/IPC
L81 8 SEA FILE=WPIX ABB=ON	PLU=ON L77 AND (L24 OR L25 OR L26)

```
L82
         1099 SEA FILE=WPIX ABB=ON PLU=ON L77 NOT L81
L83
          858 SEA FILE=WPIX ABB=ON PLU=ON L82 AND L28
           395 SEA FILE=WPIX ABB=ON PLU=ON L83 AND ((?BUTYL?/BIX,BIEX,ABEX,T
L84
               T(2A)ACRYL?/BIX,BIEX,ABEX,TT) OR ?BUTYLACRYL?/BIX,BIEX,ABEX,TT)
L85
            23 SEA FILE=WPIX ABB=ON PLU=ON L84 AND (L78 OR L79 OR L80)
L86
            1 SEA FILE=WPIX ABB=ON PLU=ON L85 AND ((L29 OR L30) OR L45)
            12 SEA FILE=WPIX ABB=ON PLU=ON L85 AND (L39 OR L40 OR L46)
L87
            23 SEA FILE-WPIX ABB-ON PLU-ON (L85 OR L86 OR L87)
L88
            23 SEA FILE-WPIX ABB-ON PLU-ON L88 AND ((L31 OR L32 OR L33 OR
L89
               L34 OR L35 OR L36 OR L37 OR L38) OR (L41 OR L42) OR (L29 OR
               L30) OR (L39 OR L40) OR (L45 OR L46))
L90
            23 SEA FILE-WPIX ABB-ON PLU-ON (L88 OR L89)
```

=> d his ful

(FILE 'HOME' ENTERED AT 08:00:11 ON 12 MAR 2008)

FILE 'STNGUIDE' ENTERED AT 08:00:14 ON 12 MAR 2008

FILE 'HCAPLUS' ENTERED AT 08:00:22 ON 12 MAR 2008 ACT PAG298HCAB/A

_____ 1) SEA ABB=ON PLU=ON US2004-824298/APPS L1 (SEL PLU=ON L1 1- RN : 8 TERMS L28) SEA ABB=ON PLU=ON L2 L3 (L4 (14) SEA ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 O3) X"/MF L5 (1) SEA ABB=ON PLU=ON L3 AND L4 177)SEA ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CRN L6 (L7 (177) SEA ABB=ON PLU=ON L6 AND PMS/CI 177) SEA ABB=ON PLU=ON L7 OR L5 L8 (L9 STR L10 STR SCR 2043 L11 L12 (414) SEA SSS FUL (L11 AND L10 AND L9) L13 (414) SEA ABB=ON PLU=ON L5 OR L8 OR L12 0)SEA ABB=ON PLU=ON L13 AND RELATED POLYMERS/FA L14 (414) SEA ABB=ON PLU=ON L14 OR L13 L15 (414)SEA ABB=ON PLU=ON (L13 OR L15) 2)SEA ABB=ON PLU=ON L3 AND ("(C3 H4 O2)X" OR "(C9 H18 N O2 . L16 (L17 (CL)X")/MF L18 (1) SEA ABB=ON PLU=ON L3 AND "C2 H6 O"/MF L19 (1) SEA ABB=ON PLU=ON L3 AND TI/ELS L20 (1) SEA ABB=ON PLU=ON 56-81-5/RN 1) SEA ABB=ON PLU=ON GLYCERETH/CN L21 (1)SEA ABB=ON PLU=ON "GLYCERETH 26"/CN OR "GLYCERETH 7"/CN L22 (L23 (1) SEA ABB=ON PLU=ON (L21 OR L22) L24 QUE ABB=ON PLU=ON BEKELE, H?/AU L25 QUE ABB=ON PLU=ON DECKNER, G?/AU L26 OUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA L27 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY<2003 OR REVIEW/DT L28 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 L29 QUE ABB=ON PLU=ON ?GLYCERYL?(1T)ETHER? L30 QUE ABB=ON PLU=ON ?GLYCERYL? (3A) ETHER? L31 QUE ABB=ON PLU=ON POLAR? QUE ABB=ON PLU=ON WATER OR H2O OR AO OR AQUEOUS? L32 OUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETOH L33 OUE ABB=ON PLU=ON CATION? L34

```
L35
                QUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?) OR
                (POLY(1T)?ACRYLAT?)
L36
                OUE ABB=ON PLU=ON ETHOXYL?
L37
                QUE ABB=ON PLU=ON ?GLYCOL?
                QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL OR
L38
                GLYCOL OR TRIOL
L39
                QUE ABB=ON PLU=ON ?PIGMENT?
L40
                QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMINA OR
                BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR? OR
                TITANIUM OR TITANIA OR TITANAT? OR MICA
               OUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HYGIEN?
L41
              QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
QUE ABB=ON PLU=ON COSMETICS
L42
L43
L44
              QUE ABB=ON PLU=ON ETHERS+PFT,OLD,NEW,NT/CT (L)?GLYCERYL?
              QUE ABB=ON PLU=ON ?GLYCERETH?
L45
L46
              QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L47
              QUE ABB=ON PLU=ON PIGMENTS+PFT,OLD,NEW,NT/CT
                QUE ABB=ON PLU=ON "PIGMENTS, NONBIOLOGICAL"+PFT,OLD,NEW,NT/CT
L48
           244) SEA ABB=ON PLU=ON L16
L49 (
L50 (
            10)SEA ABB=ON PLU=ON L49 AND ((L17 OR L18 OR L19) OR L20 OR
               L23)
             3) SEA ABB=ON PLU=ON L49 AND COSMET?/SC, SX
             7) SEA ABB=ON PLU=ON L49 AND (L41 OR L42 OR L43)
L52 (
             1)SEA ABB=ON PLU=ON L49 AND ((L29 OR L30) OR L44)
L53 (
           16)SEA ABB=ON PLU=ON L49 AND L35
112)SEA ABB=ON PLU=ON L49 AND (L31 OR L32 OR L33)
L54 (
L55 (
            2)SEA ABB=ON PLU=ON L49 AND ((L36(4A)L37) OR L45)
L56 (
            87) SEA ABB=ON PLU=ON L49 AND L38
L57 (
L58 (
            70) SEA ABB=ON PLU=ON L49 AND (L39 OR L40 OR L46 OR (L47 OR
               L48))
             1) SEA ABB=ON PLU=ON L49 AND (L24 OR L25 OR L26)
L59 (
             1)SEA ABB=ON PLU=ON L1 AND L59
1)SEA ABB=ON PLU=ON (L59 OR L60)
L60 (
L61 (
L62 (
           243) SEA ABB=ON PLU=ON L49 NOT L61
          191)SEA ABB=ON PLU=ON L62 AND (L27 OR L28)
144)SEA ABB=ON PLU=ON L63 AND (L50 OR L51 OR L52 OR L53 OR L54
L63 (
L64 (
               OR L55 OR L56 OR L57 OR L58)
             2) SEA ABB=ON PLU=ON L63 AND L5
L65 (
           90)SEA ABB=ON PLU=ON L63 AND L8
90)SEA ABB=ON PLU=ON (L65 OR L66)
L66 (
L67 (
           65)SEA ABB=ON PLU=ON L64 AND L67
L68 (
L69 (
            5) SEA ABB=ON PLU=ON L68 AND (L50 OR L51 OR L52)
L70 (
             0)SEA ABB=ON PLU=ON L68 AND L56
L71 (
            23) SEA ABB=ON PLU=ON L68 AND L58
             7) SEA ABB=ON PLU=ON L68 AND (L32 AND (L33 OR L38))
L72 (
            30)SEA ABB=ON PLU=ON (L69 OR L70 OR L71 OR L72)
L73 (
L74 (
             4) SEA ABB=ON PLU=ON L73 AND L34
L75
             30 SEA ABB=ON PLU=ON (L73 OR L74)
               _____
     FILE 'STNGUIDE' ENTERED AT 08:00:52 ON 12 MAR 2008
     FILE 'LWPI' ENTERED AT 08:01:02 ON 12 MAR 2008
```

FILE 'WPIX' ENTERED AT 08:01:19 ON 12 MAR 2008
E HYDROXYBUTYL ACRYLATE/CN
E ACRYLOYL HYDROXYBUTANE/CN

L76 QUE ABB=ON PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022 OR H0033)/PLE

```
FILE 'WPIX' ENTERED AT 08:03:32 ON 12 MAR 2008
L77
          1107 SEA ABB=ON PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022 OR
               H0033)/PLE
    FILE 'STNGUIDE' ENTERED AT 08:04:04 ON 12 MAR 2008
               D QUE L76
               D QUE L75
    FILE 'LWPI' ENTERED AT 08:07:08 ON 12 MAR 2008
               OUE ABB=ON PLU=ON (A12-V04 OR D08-B OR B14-R? OR C14-R?)/MC
L78
               QUE ABB=ON PLU=ON (B12-L02 OR C12-L02)/MC
L79
               OUE ABB=ON PLU=ON (A61K0008 OR A610?)/IPC
L80
    FILE 'WPIX' ENTERED AT 08:08:57 ON 12 MAR 2008
             8 SEA ABB=ON PLU=ON L77 AND (L24 OR L25 OR L26)
L81
               D TRI 1-8
L82
          1099 SEA ABB=ON PLU=ON L77 NOT L81
           858 SEA ABB=ON PLU=ON L82 AND L28
L83
           395 SEA ABB=ON PLU=ON L83 AND ((?BUTYL?/BIX,BIEX,ABEX,TT(2A)ACRYL
L84
               ?/BIX,BIEX,ABEX,TT) OR ?BUTYLACRYL?/BIX,BIEX,ABEX,TT)
               D KWIC
               D CODE 1
               E R00708/PLE
               E E27+ALL
            23 SEA ABB=ON PLU=ON L84 AND (L78 OR L79 OR L80)
L85
            1 SEA ABB=ON PLU=ON L85 AND ((L29 OR L30) OR L45)
L86
L87
            12 SEA ABB=ON PLU=ON L85 AND (L39 OR L40 OR L46)
            23 SEA ABB=ON PLU=ON (L85 OR L86 OR L87)
L88
L89
            23 SEA ABB=ON PLU=ON L88 AND ((L31 OR L32 OR L33 OR L34 OR L35
               OR L36 OR L37 OR L38) OR (L41 OR L42) OR (L29 OR L30) OR (L39
               OR L40) OR (L45 OR L46))
L90
            23 SEA ABB=ON PLU=ON (L88 OR L89)
               D TRI 19-23
               D KWIC 18-20
    FILE 'STNGUIDE' ENTERED AT 08:18:47 ON 12 MAR 2008
    FILE 'WPIX' ENTERED AT 08:20:58 ON 12 MAR 2008
               SAVE TEMP L90 PAG298WPIB/A
    FILE 'STNGUIDE' ENTERED AT 08:21:29 ON 12 MAR 2008
               D OUE STAT L81
               D OUE STAT L90
    FILE HOME
    FILE STNGUIDE
    FILE CONTAINS CURRENT INFORMATION.
    LAST RELOADED: Mar 7, 2008 (20080307/UP).
    FILE HCAPLUS
    Copyright of the articles to which records in this database refer is
    held by the publishers listed in the PUBLISHER (PB) field (available
    for records published or updated in Chemical Abstracts after December
    26, 1996), unless otherwise indicated in the original publications.
```

The CA Lexicon is the copyrighted intellectual property of the

the American Chemical Society and is provided to assist you in searching

databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 11 Mar 2008 (20080311/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE LWPI

LWPI IS A STATIC LEARNING FILE

>>> PATENT DRAWINGS AVAILABLE FOR DISPLAY <<<

FILE WPIX

FILE LAST UPDATED: 10 MAR 2008 <20080310/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200817 <200817/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to the end of
November 2007. No update date (UP) has been created for the
reclassified documents, but they can be identified by
20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and
20071130/UPIC. <<</pre>

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://scientific.thomson.com/support/patents/coverage/latestupdates/

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0: http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0710.p

- >>> XML document distribution format now available See HELP XMLDOC <<<
- >>> ECLA Codes and Current US National Classifications have been added see NEWS and HELP CHANGE <<<
- >>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<
- >>> Updated PDF files in the following links:
 http://www.stn-international.de/stndatabases/details/ico_0801.zip
 http://www.stn-international.de/stndatabases/details/epc_0801.zip
 Supplement of all changed ECLA items:
 http://www.stn-international.de/stndatabases/details/ecla_0802s.zip <</pre>

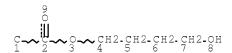
=> d que stat 110 L6 (1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS SEL PLU=ON L6 1- RN : 8 TERMS L7 L8 (8) SEA FILE=REGISTRY ABB=ON PLU=ON L7 L9 (14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 03)X"/MF 1 SEA FILE=REGISTRY ABB=ON PLU=ON L8 AND L9 L10 => d que stat 118 L11 (1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS L12 SEL PLU=ON L11 1- RN: 8 TERMS L13 (8)SEA FILE=REGISTRY ABB=ON PLU=ON L12 L14 (14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 03)X"/MF L15 (1)SEA FILE=REGISTRY ABB=ON PLU=ON L13 AND L14 177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR L16 (Ν L17 (177)SEA FILE=REGISTRY ABB=ON PLU=ON L16 AND PMS/CI T₁18 177 SEA FILE=REGISTRY ABB=ON PLU=ON L17 OR L15

=> d que stat 122 L19 STF

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE L20 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE L21 SCR 2043

L22 414 SEA FILE=REGISTRY SSS FUL (L21 AND L20 AND L19)

100.0% PROCESSED 21976 ITERATIONS 414 ANSWERS

SEARCH TIME: 00.00.01

=> d que stat 138 1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS L23 (L24 SEL PLU=ON L23 1- RN: 8 TERMS L25 (8) SEA FILE=REGISTRY ABB=ON PLU=ON L24 L26 (14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 03)X"/MF L27 (1) SEA FILE=REGISTRY ABB=ON PLU=ON L25 AND L26 L28 (177)SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR Ν 177)SEA FILE=REGISTRY ABB=ON PLU=ON L28 AND PMS/CI L29 (L30 (177) SEA FILE=REGISTRY ABB=ON PLU=ON L29 OR L27 L31 STR

7 c~2~2~2H2-cH2-0H

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L32 STR

C~ C+2-CH2-CH2-CH2-OH 1 - C+2-CH2-CH2-OH

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L33 SCR 2043

L34 (414)SEA FILE=REGISTRY SSS FUL (L33 AND L32 AND L31)

,	0) SEA 414) SEA		BB=ON PLU=ON BB=ON PLU=ON	
=> d que	stat 1152			
-		FILE=HCAPLUS ABB	B=ON PLU=ON	US2004-824298/APPS
		PLU=ON L78 1-		
L80 (8)SEA	FILE=REGISTRY AB	BB=ON PLU=ON	L79
				"(C7 H12 O3 . C6 H10
	03)2	K"/MF		
L82 (1)SEA	FILE=REGISTRY AB	BB=ON PLU=ON	L80 AND L81
L83 (177) SEA	FILE=REGISTRY AB	BB=ON PLU=ON	2478-10-6/CRN AND 868-77-9/CR
	N			
L84 (177)SEA	FILE=REGISTRY AB	BB=ON PLU=ON	L83 AND PMS/CI
L85 (177)SEA	FILE=REGISTRY AB	BB=ON PLU=ON	L84 OR L82
L86	STR			
7				
iĬ				
$\frac{C}{1}$	CH2-CH2-0 4 5 6	H		

NODE ATTRIBUTES:

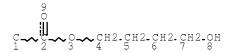
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

NOMBER OF NODES 13

STEREO ATTRIBUTES: NONE L87 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

DIDING HILLI	100110: 110111
L88	SCR 2043
L89 (414) SEA FILE=REGISTRY SSS FUL (L88 AND L87 AND L86)
L90 (414)SEA FILE=REGISTRY ABB=ON PLU=ON L82 OR L85 OR L89
L91 (0)SEA FILE=REGISTRY ABB=ON PLU=ON L90 AND RELATED POLYMERS/FA
L92 (414)SEA FILE=REGISTRY ABB=ON PLU=ON L91 OR L90
L93 (414)SEA FILE=REGISTRY ABB=ON PLU=ON (L90 OR L92)

T O 4 /	
L94 (2) SEA FILE=REGISTRY ABB=ON PLU=ON L80 AND ("(C3 H4 O2)X" OR
* O = 1	"(C9 H18 N O2 . CL)X")/MF
L95 (1) SEA FILE=REGISTRY ABB=ON PLU=ON L80 AND "C2 H6 O"/MF
L96 (1) SEA FILE=REGISTRY ABB=ON PLU=ON L80 AND TI/ELS
L97 (1)SEA FILE=REGISTRY ABB=ON PLU=ON 56-81-5/RN
L98 (1)SEA FILE=REGISTRY ABB=ON PLU=ON GLYCERETH/CN
L99 (1)SEA FILE=REGISTRY ABB=ON PLU=ON "GLYCERETH 26"/CN OR
	"GLYCERETH 7"/CN
L100(1)SEA FILE=REGISTRY ABB=ON PLU=ON (L98 OR L99)
L101	QUE ABB=ON PLU=ON BEKELE, H?/AU
L102	QUE ABB=ON PLU=ON DECKNER, G?/AU
L103	QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L104	QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
	<2003 OR REVIEW/DT
L105	QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
L106	QUE ABB=ON PLU=ON ?GLYCERYL?(1T)ETHER?
L107	QUE ABB=ON PLU=ON ?GLYCERYL?(3A)ETHER?
L108	QUE ABB=ON PLU=ON POLAR?
L109	QUE ABB=ON PLU=ON WATER OR H2O OR AQ OR AQUEOUS?
L110	QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETO
	Н
L111	QUE ABB=ON PLU=ON CATION?
L112	QUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?)
	OR (POLY(1T)?ACRYLAT?)
L113	QUE ABB=ON PLU=ON ETHOXYL?
L114	QUE ABB=ON PLU=ON ?GLYCOL?
L115	QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL
	OR GLYCOL OR TRIOL
L116	QUE ABB=ON PLU=ON ?PIGMENT?
L117	QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMI
	NA OR BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR
	? OR TITANIUM OR TITANIA OR TITANAT? OR MICA
L118	QUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HY
	GIEN?
L119	QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
L120	QUE ABB=ON PLU=ON COSMETICS
L121	QUE ABB=ON PLU=ON ETHERS+PFT,OLD,NEW,NT/CT (L)?GLYCERY
	L?
L122	QUE ABB=ON PLU=ON ?GLYCERETH?
L123	QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L124	QUE ABB=ON PLU=ON PIGMENTS+PFT,OLD,NEW,NT/CT
L125	QUE ABB=ON PLU=ON "PIGMENTS, NONBIOLOGICAL"+PFT,OLD,NE
	W,NT/CT
L126(244)SEA FILE=HCAPLUS ABB=ON PLU=ON L93
L127(10)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND ((L94 OR L95 OR L96)
	OR L97 OR L100)
L128(3)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND COSMET?/SC,SX
L129(7)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L118 OR L119 OR
	L120)
L130(1)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND ((L106 OR L107) OR
	L121)
L131(16)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND L112
L132(112)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L108 OR L109 OR
	L110)
L133(2)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND ((L113(4A)L114) OR
	L122)
L134(87)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND L115
L135(70)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L116 OR L117 OR
	L123 OR (L124 OR L125))
L136(1)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L101 OR L102 OR

	10/02/1,250
	L103)
L137(1) SEA FILE=HCAPLUS ABB=ON PLU=ON L78 AND L136
L138(1)SEA FILE=HCAPLUS ABB=ON PLU=ON (L136 OR L137)
L139(243)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 NOT L138
L140(191)SEA FILE=HCAPLUS ABB=ON PLU=ON L139 AND (L104 OR L105)
L141(144)SEA FILE=HCAPLUS ABB=ON PLU=ON L140 AND (L127 OR L128 OR
	L129 OR L130 OR L131 OR L132 OR L133 OR L134 OR L135)
L142(2)SEA FILE=HCAPLUS ABB=ON PLU=ON L140 AND L82
L143(90)SEA FILE=HCAPLUS ABB=ON PLU=ON L140 AND L85
L144(90)SEA FILE=HCAPLUS ABB=ON PLU=ON (L142 OR L143)
L145(65)SEA FILE=HCAPLUS ABB=ON PLU=ON L141 AND L144
L146(5)SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND (L127 OR L128 OR
	L129)
L147(0)SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND L133
L148(23)SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND L135
L149(7)SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND (L109 AND (L110 OR
	L115))
L150(30)SEA FILE=HCAPLUS ABB=ON PLU=ON (L146 OR L147 OR L148 OR
	L149)
L151(4) SEA FILE=HCAPLUS ABB=ON PLU=ON L150 AND L111
L152	30 SEA FILE=HCAPLUS ABB=ON PLU=ON (L150 OR L151)
=> d que	1191
L158	QUE ABB=ON PLU=ON BEKELE, H?/AU
L159	QUE ABB=ON PLU=ON DECKNER, G?/AU
L160	QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L161	QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
L162	QUE ABB=ON PLU=ON ?GLYCERYL?(1T)ETHER?
L163	QUE ABB=ON PLU=ON ?GLYCERYL?(3A)ETHER?
L164	QUE ABB=ON PLU=ON POLAR?
L165	QUE ABB=ON PLU=ON WATER OR H2O OR AQ OR AQUEOUS?
L166	QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETO
	Н
L167	QUE ABB=ON PLU=ON CATION?
L168	QUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?)
	OR (POLY(1T)?ACRYLAT?)
L169	QUE ABB=ON PLU=ON ETHOXYL?
L170	QUE ABB=ON PLU=ON ?GLYCOL?
L171	QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL
	OR GLYCOL OR TRIOL
L172	QUE ABB=ON PLU=ON ?PIGMENT?
L173	QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMI
	NA OR BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR
	? OR TITANIUM OR TITANIA OR TITANAT? OR MICA
L174	QUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HY
	GIEN?
L175	QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
L176	QUE ABB=ON PLU=ON ?GLYCERETH?
L177	QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L178(1107) SEA FILE=WPIX ABB=ON PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022
(OR H0033)/PLE
L179	QUE ABB=ON PLU=ON (A12-V04 OR D08-B OR B14-R? OR C14-R
111/	?)/MC
L180	QUE ABB=ON PLU=ON (B12-L02 OR C12-L02)/MC
L181	QUE ABB=ON PLU=ON (A61K0008 OR A61Q?)/IPC
L182(8)SEA FILE=WPIX ABB=ON PLU=ON L178 AND (L158 OR L159 OR L160)
L183(1099) SEA FILE=WPIX ABB=ON PLU=ON L178 NOT L182
L184(858) SEA FILE=WPIX ABB=ON PLU=ON L183 AND L161
L184(L185(395) SEA FILE=WPIX ABB=ON PLU=ON L183 AND L181 395) SEA FILE=WPIX ABB=ON PLU=ON L184 AND ((?BUTYL?/BIX,BIEX,ABEX,
птоэ (SSSISEA FILE-WEIN ADD-ON FLU-ON LIGH AND ((:DUIIL:/DIA,BIEA,ABEA,

```
TT(2A)ACRYL?/BIX,BIEX,ABEX,TT) OR ?BUTYLACRYL?/BIX,BIEX,ABEX,TT
            23) SEA FILE=WPIX ABB=ON PLU=ON L185 AND (L179 OR L180 OR L181)
L186(
L187(
            1) SEA FILE-WPIX ABB-ON PLU-ON L186 AND ((L162 OR L163) OR
               L176)
L188(
            12) SEA FILE=WPIX ABB=ON PLU=ON L186 AND (L172 OR L173 OR L177)
L189(
            23)SEA FILE=WPIX ABB=ON PLU=ON (L186 OR L187 OR L188)
L190(
            23) SEA FILE-WPIX ABB-ON PLU-ON L189 AND ((L164 OR L165 OR L166
               OR L167 OR L168 OR L169 OR L170 OR L171) OR (L174 OR L175) OR
               (L162 OR L163) OR (L172 OR L173) OR (L176 OR L177))
            23 SEA FILE=WPIX ABB=ON PLU=ON (L189 OR L190)
T.191
=> d his 1202
    (FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 09:07:39 ON 14 MAR 2008)
            5 S L201 AND L105
L202
=> d que nos 1202
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L6 (
L7
              SEL PLU=ON L6 1- RN: 8 TERMS
            8) SEA FILE=REGISTRY ABB=ON PLU=ON L7
L8 (
L9 (
            14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
              03)X"/MF
            1 SEA FILE=REGISTRY ABB=ON PLU=ON L8 AND L9
L10
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L11 (
               SEL PLU=ON L11 1- RN: 8 TERMS
L12
L13 (
            8) SEA FILE=REGISTRY ABB=ON PLU=ON L12
L14 (
            14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
               03)X"/MF
             1) SEA FILE=REGISTRY ABB=ON PLU=ON L13 AND L14
L15 (
L16 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
              N
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L16 AND PMS/CI
L17 (
          177 SEA FILE=REGISTRY ABB=ON PLU=ON L17 OR L15
L18
L23 (
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L24
               SEL PLU=ON L23 1- RN: 8 TERMS
L25 (
            8) SEA FILE=REGISTRY ABB=ON PLU=ON L24
L26 (
           14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
               03)X"/MF
L27 (
             1) SEA FILE=REGISTRY ABB=ON PLU=ON L25 AND L26
           177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
L28 (
               Ν
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L28 AND PMS/CI
L30 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L29 OR L27
L31
               STR
L32
               STR
L33
               SCR 2043
L34 (
          414) SEA FILE=REGISTRY SSS FUL (L33 AND L32 AND L31)
L35 (
          414) SEA FILE=REGISTRY ABB=ON PLU=ON L27 OR L30 OR L34
L36 (
             0) SEA FILE=REGISTRY ABB=ON PLU=ON L35 AND RELATED POLYMERS/FA
           414) SEA FILE=REGISTRY ABB=ON PLU=ON L36 OR L35
L37 (
L38
           414 SEA FILE=REGISTRY ABB=ON PLU=ON (L35 OR L37)
L101
               QUE ABB=ON PLU=ON BEKELE, H?/AU
L102
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L103
              QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
               QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
L105
               QUE ABB=ON PLU=ON (A61K0008 OR A610?)/IPC
L181
L194
          110 SEA L38
L195
            1 SEA L194 AND (L101 OR L102 OR L103)
```

```
L196
          109 SEA L194 NOT L195
L197
           94 SEA L196 AND L105
L198
             3 SEA L197 AND L10
L199
            60 SEA L196 AND L18
L200
             4 SEA L199 AND L181
L201
             7 SEA L198 OR L200
L202
             5 SEA L201 AND L105
=> d que 1210
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS, SO, PA
L103
               OUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
L105
            28 SEA FILE=JAPIO ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR
L203
               (?HYDROXY?(1W)ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR
               CH3) (2A) ACRYL?))
L204
            96 SEA FILE=JAPIO ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR
               (?HYDROXY?(3W)?BUTYL?))(3A)?ACRYL?
L205
             1 SEA FILE=JAPIO ABB=ON PLU=ON L203 AND L204
             0 SEA FILE=JAPIO ABB=ON PLU=ON L205 AND (BEKELE OR DECKNER)/AU
L206
L207
             O SEA FILE-JAPIO ABB-ON PLU-ON L205 AND L103
            O SEA FILE=JAPIO ABB=ON PLU=ON (L206 OR L207)
L208
L209
            1 SEA FILE=JAPIO ABB=ON PLU=ON L205 NOT L208
            1 SEA FILE=JAPIO ABB=ON PLU=ON L209 AND L105
L210
=> d que nos 1230
               QUE ABB=ON PLU=ON BEKELE, H?/AU
L101
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L102
L103
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
               OUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
L104
               <2003 OR REVIEW/DT
L116
               QUE ABB=ON PLU=ON ?PIGMENT?
               QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMI
L117
               NA OR BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR
               ? OR TITANIUM OR TITANIA OR TITANAT? OR MICA
L122
               QUE ABB=ON PLU=ON ?GLYCERETH?
               QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L123
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
L211
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L212
           904 SEA FILE=MEDLINE ABB=ON PLU=ON L212
L215
             4 SEA FILE=MEDLINE ABB=ON PLU=ON L211
L216
L218
               QUE ABB=ON PLU=ON POLYMERS+PFT, OLD, NEW, NT/CT
L219
               OUE ABB=ON PLU=ON "POLYMETHACRYLIC ACIDS"+PFT,OLD,NEW,
               NT/CT
L220
           617 SEA FILE=MEDLINE ABB=ON PLU=ON ((L215 OR L216) OR (L211 OR
               L212)) AND (L218 OR L219)
L221
           617 SEA FILE=MEDLINE ABB=ON PLU=ON L220 AND (L215 OR L216)
L222
               QUE ABB=ON PLU=ON COSMETICS+PFT, OLD, NEW, NT/CT
L223
             6 SEA FILE=MEDLINE ABB=ON PLU=ON L221 AND L222
L224
             O SEA FILE=MEDLINE ABB=ON PLU=ON L221 AND L122
L225
            78 SEA FILE=MEDLINE ABB=ON PLU=ON L221 AND ((L116 OR L117) OR
               L123)
L226
            15 SEA FILE=MEDLINE ABB=ON PLU=ON L225 AND (L116 OR L123)
L227
            21 SEA FILE=MEDLINE ABB=ON PLU=ON (L223 OR L224) OR L226
L228
            O SEA FILE=MEDLINE ABB=ON PLU=ON L227 AND (L101 OR L102 OR
               L103)
L229
            21 SEA FILE=MEDLINE ABB=ON PLU=ON L227 NOT L228
L230
            11 SEA FILE=MEDLINE ABB=ON PLU=ON L229 AND L104
```

```
=> d que nos 1243
L101
               OUE ABB=ON PLU=ON BEKELE, H?/AU
L102
               QUE ABB=ON PLU=ON DECKNER, G?/AU
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L103
               QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
L104
               <2003 OR REVIEW/DT
               QUE ABB=ON PLU=ON ?PIGMENT?
L116
L123
               QUE ABB=ON PLU=ON COLOR? OR COLOUR?
               OUE ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(
L192
               1W) ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)A
               CRYL?))
L193
               OUE ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY
               ?(3W)?BUTYL?))(3A)?ACRYL?
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
L211
L212
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L233
           993 SEA FILE=EMBASE ABB=ON PLU=ON L212
             O SEA FILE=EMBASE ABB=ON PLU=ON L211
L234
               QUE ABB=ON PLU=ON "POLYACRYLIC ACID"+PFT, OLD, NEW, NT/CT
L235
            25 SEA FILE=EMBASE ABB=ON PLU=ON ((L233 OR L234) OR (L192 OR
L236
               L193)) AND L235
               QUE ABB=ON PLU=ON COSMETIC+PFT, OLD, NEW, NT/CT
L237
L238
             1 SEA FILE=EMBASE ABB=ON PLU=ON L236 AND (L116 OR L123)
             2 SEA FILE=EMBASE ABB=ON PLU=ON L236 AND L237
L239
             0 SEA FILE=EMBASE ABB=ON PLU=ON L236 AND (L101 OR L102 OR
L240
               L103)
            25 SEA FILE=EMBASE ABB=ON PLU=ON L236 NOT L240
L241
            16 SEA FILE=EMBASE ABB=ON PLU=ON L241 AND L104
L242
             3 SEA FILE=EMBASE ABB=ON PLU=ON L242 AND (L238 OR L239 OR
L243
               L240)
=> d his 1254
     (FILE 'BIOSIS, CABA, DRUGU, VETU, BIOTECHNO' ENTERED AT 09:30:43 ON 14
    MAR 2008)
L254
             3 S L253 AND L104
=> d que nos 1254
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L11 (
L12
               SEL PLU=ON L11 1- RN: 8 TERMS
L13 (
             8) SEA FILE=REGISTRY ABB=ON PLU=ON L12
L14 (
            14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
               03)X"/MF
L15 (
             1) SEA FILE=REGISTRY ABB=ON PLU=ON L13 AND L14
           177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
L16 (
L17 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L16 AND PMS/CI
L18
           177 SEA FILE=REGISTRY ABB=ON PLU=ON L17 OR L15
L23 (
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L24
               SEL PLU=ON L23 1- RN:
                                             8 TERMS
L25 (
             8) SEA FILE=REGISTRY ABB=ON PLU=ON L24
L26 (
            14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
               03)X"/MF
L27 (
             1) SEA FILE=REGISTRY ABB=ON PLU=ON L25 AND L26
L28 (
           177)SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
               Ν
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L28 AND PMS/CI
L29 (
L30 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L29 OR L27
L31
               STR
```

```
L32
               STR
L33
               SCR 2043
L34 (
           414) SEA FILE=REGISTRY SSS FUL (L33 AND L32 AND L31)
L35 (
           414) SEA FILE=REGISTRY ABB=ON PLU=ON L27 OR L30 OR L34
             0) SEA FILE=REGISTRY ABB=ON PLU=ON L35 AND RELATED POLYMERS/FA
L36 (
           414) SEA FILE=REGISTRY ABB=ON PLU=ON L36 OR L35
L37 (
L38
           414 SEA FILE=REGISTRY ABB=ON PLU=ON (L35 OR L37)
L101
               QUE ABB=ON PLU=ON BEKELE, H?/AU
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L102
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS, SO, PA
L103
               OUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
L104
               <2003 OR REVIEW/DT
               OUE ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(
L192
               1W) ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)A
               CRYL?))
L193
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY
               ?(3W)?BUTYL?))(3A)?ACRYL?
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
L211
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L212
L244
             0 SEA L38
L245
             0 SEA L18
           813 SEA L212
L246
L247
             3 SEA L211
L249
           815 SEA L244 OR L245 OR L246 OR L247
           346 SEA L249 AND (?POLYMER OR ?POLYMERI?)
L250
             3 SEA L250 AND (L246 OR L192) AND (L247 OR L193)
L251
             0 SEA L251 AND (L101 OR L102 OR L103)
L252
L253
             3 SEA L251 NOT L252
L254
             3 SEA L253 AND L104
```

=> d his 1270

(FILE 'PASCAL, APOLLIT, CEABA-VTB, LIFESCI, BIOENG, BIOTECHDS, DRUGB, VETB, CABA, KOSMET, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 09:40:55 ON 14 MAR 2008)

L270 19 S L268 OR L269

FILE 'STNGUIDE' ENTERED AT 10:03:07 ON 14 MAR 2008

```
=> d que nos 1270
L101
               QUE ABB=ON PLU=ON BEKELE, H?/AU
               OUE ABB=ON PLU=ON DECKNER, G?/AU
L102
L103
               OUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L104
               QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
               <2003 OR REVIEW/DT
L106
               QUE ABB=ON PLU=ON ?GLYCERYL? (1T) ETHER?
L107
               QUE ABB=ON PLU=ON ?GLYCERYL? (3A) ETHER?
L110
               QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETO
               Η
L111
               OUE ABB=ON PLU=ON CATION?
L112
               QUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?)
               OR (POLY(1T)?ACRYLAT?)
L114
               QUE ABB=ON PLU=ON ?GLYCOL?
L115
               QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL
                OR GLYCOL OR TRIOL
L116
               QUE ABB=ON PLU=ON ?PIGMENT?
               OUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMI
L117
               NA OR BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR
               ? OR TITANIUM OR TITANIA OR TITANAT? OR MICA
```

L118		QUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HY
		GIEN?
L119		QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
L122		QUE ABB=ON PLU=ON ?GLYCERETH?
L123		QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L192		QUE ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(
		1W)ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)A
		CRYL?))
L193		QUE ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY
		?(3W)?BUTYL?))(3A)?ACRYL?
L211	1	SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
L212	1	SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L255		SEL PLU=ON L212 1- NAME: 19 TERMS
L256	10885	SEA L255
L257		SEL PLU=ON L211 1- NAME: 6 TERMS
L258	128	SEA L257
L259	76	SEA (L256 OR L192) AND (L258 OR L193)
L260	0	SEA L259 AND (L101 OR L102 OR L103)
L261	76	SEA L259 NOT L260
L262	57	SEA L261 AND L104
L263	3	SEA L262 AND ((L116 OR L117) OR L123)
L264	0	SEA L262 AND (L118 OR L119)
L265	0	SEA L262 AND ((L106 OR L107) OR L122)
L266	8	SEA L262 AND (L111 OR L112)
L267	10	SEA L262 AND (L110 OR L115 OR L114)
L268	19	SEA L263 OR L264 OR L265 OR L266 OR L267
L269	3	SEA L268 AND (L192/IT, TI, CC, CT, ST, STP OR L193/IT, TI, CC, CT, ST, ST
		P)
L270	19	SEA L268 OR L269

=> dup rem 1152 1191 1202 1210 1230 1243 1254 1270 DUPLICATE IS NOT AVAILABLE IN 'KOSMET'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE FILE 'HCAPLUS' ENTERED AT 10:05:58 ON 14 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIX' ENTERED AT 10:05:58 ON 14 MAR 2008 COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'USPATFULL' ENTERED AT 10:05:58 ON 14 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 10:05:58 ON 14 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'JAPIO' ENTERED AT 10:05:58 ON 14 MAR 2008 COPYRIGHT (C) 2008 Japanese Patent Office (JPO) - JAPIO

FILE 'MEDLINE' ENTERED AT 10:05:58 ON 14 MAR 2008

FILE 'EMBASE' ENTERED AT 10:05:58 ON 14 MAR 2008 Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE 'BIOSIS' ENTERED AT 10:05:58 ON 14 MAR 2008 Copyright (c) 2008 The Thomson Corporation

FILE 'PASCAL' ENTERED AT 10:05:58 ON 14 MAR 2008

Any reproduction or dissemination in part or in full, by means of any process and on any support whatsoever is prohibited without the prior written agreement of INIST-CNRS. COPYRIGHT (C) 2008 INIST-CNRS. All rights reserved. FILE 'APOLLIT' ENTERED AT 10:05:58 ON 14 MAR 2008

COPYRIGHT (c) 2008 FIZ Karlsruhe

FILE 'CEABA-VTB' ENTERED AT 10:05:58 ON 14 MAR 2008 COPYRIGHT (c) 2008 DECHEMA eV

FILE 'BIOENG' ENTERED AT 10:05:58 ON 14 MAR 2008 COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)

FILE 'BIOTECHDS' ENTERED AT 10:05:58 ON 14 MAR 2008 COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'SCISEARCH' ENTERED AT 10:05:58 ON 14 MAR 2008 Copyright (c) 2008 The Thomson Corporation

FILE 'DISSABS' ENTERED AT 10:05:58 ON 14 MAR 2008 COPYRIGHT (C) 2008 ProQuest Information and Learning Company; All Rights Reserved. PROCESSING COMPLETED FOR L152 PROCESSING COMPLETED FOR L191 PROCESSING COMPLETED FOR L202 PROCESSING COMPLETED FOR L210

PROCESSING COMPLETED FOR L230 PROCESSING COMPLETED FOR L243 PROCESSING COMPLETED FOR L254

PROCESSING COMPLETED FOR L270

84 DUP REM L152 L191 L202 L210 L230 L243 L254 L270 (11 DUPLICATES L271 REMOVED)

> ANSWERS '1-30' FROM FILE HCAPLUS ANSWERS '31-51' FROM FILE WPIX ANSWER '52' FROM FILE USPATFULL ANSWER '53' FROM FILE JAPIO ANSWERS '54-64' FROM FILE MEDLINE ANSWERS '65-67' FROM FILE EMBASE ANSWERS '68-70' FROM FILE BIOSIS ANSWERS '71-73' FROM FILE PASCAL ANSWERS '74-75' FROM FILE APOLLIT ANSWER '76' FROM FILE CEABA-VTB ANSWER '77' FROM FILE BIOENG ANSWER '78' FROM FILE BIOTECHDS ANSWERS '79-83' FROM FILE SCISEARCH ANSWER '84' FROM FILE DISSABS

=> file stnguide

FILE 'STNGUIDE' ENTERED AT 10:06:26 ON 14 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Mar 7, 2008 (20080307/UP).

=> d ibib ed abs hitind hitstr
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE,
EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS'
- CONTINUE? (Y)/N:y

L271 ANSWER 1 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2003:414118 HCAPLUS Full-text

DOCUMENT NUMBER: 138:402400

TITLE: Hydrophilic polymers and preparation and use

INVENTOR(S): Holguin, Daniel L.

PATENT ASSIGNEE(S): Avery Dennison Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S.

Ser. No. 757,980. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

20020426 <			
20000331 <			
20010110 <			
20030425 <			
I, CN,			
G, GH,			
LR,			
oM,			
R, TT,			
, 11,			
S, BY,			
E, ES,			
TR,			
), TG			
20030425 <			
10312 <			
00331 <			
.0110 <			
20426 <			
0425			
01 3 HEKZE ZEKC34 012			

ED Entered STN: 30 May 2003

AB The hydrophilic water-insol., gel-free copolymers of 2-hydroxyethyl methacrylate, and ≥1 of acrylic acid or methacrylic acid, and 2-hydroxyethyl methacrylate, 4-hydroxybutyl acrylate, and acrylic or methacrylic acid, are prepared in a solution of £20 and alc. using monomeric 2-hydroxyethyl methacrylate containing ethylene givcol dimethacrylate impurities .ltorsim.0.15% and substantially in the absence of a chain transfer agent. The copolymers are made £20 soluble copolymers by pH adjustment. The invention also provides a method for the preparation of a copolymer of 2-hydroxyethyl methacrylate and 4-hydroxybutyl acrylate, and a homopolymer of 2-hydroxyethyl methacrylate in a solution of £20 and either a monoalc. or a polyhydric alc. The polymers are useful in topical skin applications,

```
including use as <u>cosmetic</u> compns., dermatol. compns., and flexible skin
     coatings, and as pressure sensitive adhesives.
     ICM C08F120-06
INCL 526317100; 526074000; 526089000; 526210000; 526212000; 526217000;
     526318300; 526318400; 526318420; 526329200
     35-4 (Chemistry of Synthetic High Polymers)
ΙT
    Coating materials
       Cosmetics
     Drug delivery systems
        (hydrophilic polymers of hydroxyethyl methacrylate for)
     25249-16-5P, 2-Hydroxyethyl Methacrylate homopolymer 27175-46-8P,
ΙT
     Acrylic acid-2-hydroxyethyl methacrylate copolymer 31693-08-0P,
     2-Hydroxyethyl Methacrylate-Methacrylic acid copolymer
     531523-84-9P, 4-Hydroxybutyl acrylate-2-Hydroxyethyl
     Methacrylate-Methacrylic acid copolymer
     RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
     engineered material use); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
        (hydrophilic polymers of hydroxyethyl methacrylate for)
ΙT
     25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene
     glydol
     RL: TEM (Technical or engineered material use); USES (Uses)
        (plasticizer; hydrophilic polymers of hydroxyethyl methacrylate for)
     531523-84-9P, 4-Hydroxybutyl acrylate-2-Hydroxyethyl
ΙT
     Methacrylate-Methacrylic acid copolymer
     RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or
     engineered material use); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
        (hydrophilic polymers of hydroxyethyl methacrylate for)
RN
     531523-84-9 HCAPLUS
     2-Propenoic acid, 2-methyl-, polymer with 4-hydroxybutyl 2-propenoate and
CN
     2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)
     CM
     CRN 2478-10-6
     CMF C7 H12 O3
 HO- (CH2)4-O-C-CH-CH2
     CM
          2
     CRN 868-77-9
     CMF C6 H10 O3
  H2C
    ÎŬ Й
С—С—О—СН2—СН2—ОН
```

CM 3

CRN 79-41-4 CMF C4 H6 O2



=> d ibib ed abs hitind hitstr 2-30
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE,
EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS'
- CONTINUE? (Y)/N:y

L271 ANSWER 2 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2001:747865 HCAPLUS Full-text

DOCUMENT NUMBER: 135:273382

TITLE: Hydrophilic polymers, pressure-sensitive adhesives and

coatings

INVENTOR(S): Holguin, Daniel L.; Barker, H. Paul; Lee, Ivan S. P.;

Lin, Kenneth S.

PATENT ASSIGNEE(S): Avery Dennison Corporation, USA

SOURCE: PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.					KIND		DATE			APPLICATION NO.					DATE			
WO	WO 2001074917				A1 20011011				WO 2	001-	US10	036	20010330 <					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,	
		ZA,	ZW															
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
US	6706836			B1 20040316				US 2000-540252					20000331 <					
US	2001	2001037006							US 2001-757980					20010110 <				
US	6653	427			В2		2003	1125										
CA	2403	2403661			A1 20011011			CA 2001-2403661					20010330 <					
EP	1274	750			A1		2003	0115		EP 2	001-	9264	69		2	0010	330 <-	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR							
JP 2003529648				T 20031007				JP 2001-572604					20010330 <					
DRITY APPLN. INFO.:			.:						US 2	000-	5402	52		A 2	0000	331 <		
										US 2	001-	7579	80		A 2	0010	110 <-	
										WO 2	001-	US10	036	•	W 2	0010	330 <	
Ent	arad	MT2	• 1	2 00	+ 20	∩ 1												

ED Entered STN: 12 Oct 2001

AB Gel-free hydrophilic polymers (e.g. homo- or copolymers of hydroxyethyl acrylate or hydroxybutyl acrylate low in impurities) are prepared without chain transfer agent in alc., in H2O, and in solns. of alc. and H2O. The polymers are useful as hydrophilic pressure-sensitive adhesives, coatings, hydrogels, films, topical compns., cosmetic compns., transdermal drug delivery systems, and carrier for a mucous membrane drug delivery systems. Thus, 2-hydroxyethyl methacrylate having <3% alkylene glycol methacrylate impurities and 0.05-0.1% crosslinker impurities was polymerized in EtOH.

IC ICM C08F020-26

ICS C08F216-04; C08F220-20; B05D003-00; A61K009-16

CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 38, 42

IT <u>Cosmetics</u>

Hydrogels

(hydrophilic polymers for pressure-sensitive adhesives and coatings and)

IT 25249-16-5P, Poly(2-hydroxyethyl methacrylate) 27175-46-8P, Acrylic acid-2-hydroxyethyl methacrylate copolymer 29086-87-1P, Poly(4-hydroxybutyl acrylate) 31693-08-0P, 2-Hydroxyethyl methacrylate-methacrylic acid copolymer 39990-17-5P, 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer 364051-79-6P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(hydrophilic polymers for pressure-sensitive adhesives and coatings)

IT 25322-68-3, Polyethylene glycol

RL: TEM (Technical or engineered material use); USES (Uses) (with hydrophilic polymers for pressure-sensitive adhesives)

IT 39990-17-5P, 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(hydrophilic polymers for pressure-sensitive adhesives and coatings)

RN 39990-17-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 4-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L271 ANSWER 3 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2001:798770 HCAPLUS Full-text

DOCUMENT NUMBER: 135:331825

TITLE: Hydrophilic polymers, pressure sensitive adhesives and

coatings

INVENTOR(S): Holguin, Daniel L.

PATENT ASSIGNEE(S): Avery Dennison Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S.

Ser. No. 540,252.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA:	PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
	2001 6653		06				2001 2003	1101 1125		US 2001-757980					2	20010110 <		
	6706								US 2000-540252						2	0000	331	<
	2403								CA 2001-2403661									
	2001										WO 2001-US10036							
,,,								AZ,										
	** •							DZ,										
			,	,	,	,		KE,	,	,	,	•		,	,	,	,	
		,	•	,	•	,	,	MN,	,	•		,	,	,	•	,	,	
				•				TJ,		•					•	•		
		ZA,	•	50,	υ±,	510,	о л ,	10,	,		,	,	011,	00,	02,	V 1.1,	10,	
	RW:			KE.	LS.	MW.	М7.	SD,	SL	S7.	Т7.	UG.	7.W.	AT.	BE.	CH.	CY.	
	•						•	GR,			•	•						
								GN,								,	,	
EP	1274															0010.	330	<
								FR,										
			,	,	,	,		MK,	,	,	,	,	,	,	•	- •	,	
JР	2003											5726	04		2	0010	330	<
	2003							0529										
	6743						2004	0601										
US	2004						2004	1230		US 2	004-	7995	00		2	0040	312	<
US	7019	067			В2		2006	0328										
ORIT:	Y APP	LN.	INFO	.:						US 2	000-	5402	52		A2 2	0000	331	<
										US 2	001-	7579	80		A 2	0010	110	<
										WO 2	001-	US10	036		W 2	0010	330	<
										US 2	002-	1338	08		A1 2	0020	426	<
D 4		OTINI		O NT -	- 20	Λ1												

ED Entered STN: 02 Nov 2001

AB Gel-free hydrophilic polymers (e.g. homo- or copolymers of hydroxyethyl acrylate or hydroxybutyl acrylate low in impurities) are prepared without chain transfer agent in alc., in H2O, and in solns. of alc. and H2O. For example, poly 2-hydroxyethyl methacrylate is made substantially in the absence of a chain transfer agent, comprising introducing monomeric 2-hydroxyethyl methacrylate containing ethylene glycol dimethacrylate impurities .apprx.0.05-0.1% into a solution of alc. (e.g. MeOH) and/or H2O and polymerizing

IC ICM C08F002-00

INCL 526207000

CC 35-4 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 38, 42 IT Cosmetics

Hydrogels

Polymerization

Release films

(hydrophilic polymers for pressure-sensitive adhesives and coatings and)

IT 25249-16-5P, Poly(2-hydroxyethyl methacrylate) 29086-87-1P, Poly(4-hydroxybutyl acrylate) 39990-17-5P, 4-Hydroxybutyl

acrylate-2-hydroxyethyl methacrylate copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(hydrophilic polymers for pressure-sensitive adhesives and coatings)

IT 25322-68-3, Polyethylene glycol

RL: TEM (Technical or engineered material use); USES (Uses) (plasticizer; with hydrophilic polymers for pressure-sensitive adhesives)

IT 39990-17-8P, 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(hydrophilic polymers for pressure-sensitive adhesives and coatings)

RN 39990-17-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 4-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

L271 ANSWER 4 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:656664 HCAPLUS Full-text

DOCUMENT NUMBER: 139:198842

TITLE: Method for producing chromophoric and/or

effect-producing multilayer coatings

INVENTOR(S): Baumgart, Hubert; Kussel, Daniel; Lichte, Yvonne

PATENT ASSIGNEE(S): BASF Coatings A.-G., Germany

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	PATENT NO.					KIND DATE			APPLICATION NO.								
					A2 20030821 A3 20040219			WO 2003-EP967									
WO								AZ,	RΔ	BB	BG	BB	RV	B7.	$C\Delta$	СН	CM
	VV •				•			DZ,	•			•					•
		•	•	•				JP,		•	•				•	•	
					•			MK,	•			•					•
		•	•		•		•	SK,	•	•	•	•	•	•	•	•	•
					•			ZM,	•	,	,	,	,	,	,	,	00,
	RW:	•	•		•		•	SD,		SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG	
DE	1020	6225			C1		2003	0918		DE 2	002-	1020	6225		2	0020	215 <
	2474						2003	0821	1	CA 2	003-	2474	837		2	0030	131 <
AU	2003	2057	18		A1		2003	0904	-	AU 2	003-	2057	18		2	0030	131 <
EP	1474				A2												131 <
	R:				•							•					PT,
		•	•					MK,		•	•				•		
																	701 <
					А		2004	1110									304 <
RIORIT	Y APP	LN.	TNF.O	.:						DE 2 WO 2							215 <
										W - Z	005-	EF 90	′		VV	0030.	тот

ED Entered STN: 22 Aug 2003

The invention relates to a method for producing multilayer coatings, according AB to which: (I) a primer (A) that can be cured thermally and by using actinic radiation (dual-cure) is applied to a substrate resulting in the formation of a primer layer (A); (II) the primer layer (A) is irradiated with actinic radiation resulting in the formation of a partially cured primer layer (A); (III) a thermally curable and/or a dual-cure, pigmented coating substance (B) is applied to the partially cured primer layer (A) resulting in the formation of at least one pigmented layer (B); (IV) the dual-cure layer (B) is irradiated with actinic radiation resulting in the formation of a partially cured layer (B); (V) transparent lacquer(s) (C) that can be cured using radiation and/or can be dual cured is applied to layer (B) resulting in the formation of transparent lacquer coating(s) and/or a dual-cure transparent lacquer layer(s) (C); (VI) the transparent layer(s) (C) is/are irradiated with actinic radiation resulting in the formation of a transparent coating and/or a partially cured transparent lacquer layer (C); and (VII) layers (A), (B) and (C), when only partially cured, are thermally cured together. Multilayer coatings are manufactured with improved bonding to the transparent layer by this process on plastic automobile bodies. A typical dual-cure primer contained 32.1 parts Setal 1615SS (polyester), 14.9 parts IRR 351 (acrylated, aliphatic urethane oligomer, OH number 75-90 mg KOH/g), 20 parts Desmodur N3390 (HDI trimer), and additives and solvents, and a typical dual-cure transparent coating composition contained 35.9 parts 21:652:212:383:143 acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer, 20 parts dipentaerythritol pentaacrylate, and additives and solvents in the stock lacquer and 26.02 parts Roskydal UA VPLS 2337 (HDI trimer-based isocyanato acrylate) and 6.52 parts Roskydal UA VP FWO 3003-77 (IPDI trimer-based isocyanato acrylate) in the crosslinking component.

ICM B05D007-00 IC

CC 42-2 (Coatings, Inks, and Related Products) Section cross-reference(s): 38

ΙT Polyurethanes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylates, primer component; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) ΙT Automobiles (bodies, substrates; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) Coating materials ΙT (multilayer, dual-cure; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) ΙT Coating process (multilayer; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) Polyesters, uses ΙT RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (primer component; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) Molded plastics, miscellaneous ΤT RL: MSC (Miscellaneous) (substrates; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) 401793-10-0P, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl ΙT acrylate-2-hydroxyethyl methacrylate-styrene copolymer RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process) (clearcoat precursor; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) ΙT 583059-94-3P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cured clearcoat; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) 583829-33-8P ΙT 583829-32-7P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cured primer; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) ΤТ 401793-10-0P, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process) (clearcoat precursor; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer, pigmented, and clearcoat layers) 401793-10-0 HCAPLUS RN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with CN ethenylbenzene, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate and

2-propenoic acid (CA INDEX NAME)

$$H_2C \longrightarrow CH - Ph$$

IT 583059-94-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(cured clearcoat; producing chromophoric and/or effect-producing multilayer coatings from dual-cure compns. for primer,

pigmented, and clearcoat layers)

RN 583059-94-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-propenoic acid, Roskydal UA-VP-FWO 3003-77 and Roskydal UA-VP-LS 2337 (9CI) (CA INDEX NAME)

CM 1

CRN 570400-20-3 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 334537-56-3 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 60506-81-2 CMF C25 H32 O12

CM 4

CRN 2478-10-6 CMF C7 H12 O3

CRN 868-77-9 CMF C6 H10 O3

CM 6

CRN 103-11-7 CMF C11 H20 O2

CM 7

CRN 100-42-5 CMF C8 H8

CM 8

CRN 79-10-7 CMF C3 H4 O2

L271 ANSWER 5 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:154509 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 138:189503

TITLE: Coating materials curable by heat and, optionally,

radiation

INVENTOR(S): Meisenburg, Uwe; Baumgart, Hubert; Kussel, Daniel

PATENT ASSIGNEE(S): BASF Coatings AG, Germany SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

				APPLICATION NO.					KIND DATE			PATENT NO.							
<	810	0020	2					WO 2		 0227	 2003		A1		11	0164	2003	WO	
	CN,	CH,	CA,	BZ,	BY,	BR,	BG,	BB,	BA,	ΑZ,	AU,	ΑT,	AM,	AL,	AG,	ΑE,	W:		
	GM,	GH,	GE,	GD,	GB,	FΙ,	ES,	EE,	EC,	DZ,	DM,	DK,	CZ,	CU,	CR,	CO,			
	LS,	LR,	LK,	LC,	KΖ,	KR,	KP,	KG,	KE,	JP,	IS,	IN,	IL,	ID,	HU,	HR,			
	PL,	PH,	OM,	NZ,	NO,	MZ,	MX,	MW,	MN,	MK,	MG,	MD,	MA,	LV,	LU,	LT,			
	UA,	TZ,	TT,	TR,	TN,	TM,	ТJ,	SL,	SK,	SI,	SG,	SE,	SD,	RU,	RO,	PT,			
								ZW	ZM,	ZA,	YU,	VN,	VC,	UZ,	US,	UG,			
	BG,	BE,	ΑT,	ZW,	ZM,	UG,	TZ,	SZ,	SL,	SD,	MZ,	MW,	LS,	ΚE,	GM,	GH,	RW:		
	NL,	MC,	LU,	ΙT,	ΙE,	GR,	GB,	FR,	FI,	ES,	EE,	DK,	DE,	CZ,	CY,	CH,			
	MR,	ML,	GW,	GQ,	GN,	GΑ,	CM,	CI,	CG,	CF,	ВJ,	BF,	TR,	SK,	SE,	PT,			
													ΤG	TD,	SN,	ΝE,			
<	816	0010	2		0155	1014	001-	DE 2		0306	2003		A1			0155	1014	DE	
<	810	0020	2		346	2446	002-	CA 2		0227	2003		A1			346	2446	CA	
<	810	0020	2		38	3259	002-	AU 2		0303	2003		A1		38	3259.	2002	AU	
<	810	0020	2		14	7603	002-	EP 2		0602	2004		A1			481	1423	EP	
	PT,	MC,	SE,	NL,	LU,	LI,	ΙΤ,	GR,	GB,	FR,	ES,	DK,	DE,	CH,	BE,	ΑT,	R:		
			SK	EE,	CZ,	BG,	TR,	AL,	CY,	MK,	RO,	FI,	LV,	LT,	SI,	ΙE,			
<	113	0040	2		98	4836	004-	US 2		1125	2004		A1		97	2359	2004	US	
<	816	0010	A 2		0155	1014	001-	DE 2						.:	IORITY APPLN. INFO.:				
<	810	0020	W 2	,	83	EP89	002-	WO 2											
	PL, UA, BG, NL, MR, 816 810 810 PT, 113 816	PH, TZ, BE, MC, ML, 0010 0020 0020 MC, 0040 0010	OM, TT, AT, LU, GW, 2 2 2 2 2 SE, SK, 2 A 2	NZ, TR, ZW, IT, GQ, NL, EE,	NO, TN, ZM, IE, GN, 0155 346 38 14 LU, CZ, 98 0155	MZ, TM, UG, GR, GA, 1014 2446 3259 7603 LI, BG, 4836 1014	MX, TJ, TZ, GB, CM, 001- 002- 002- IT, TR, 004- 001-	MW, SL, ZW SZ, FR, CI, DE 2 CA 2 AU 2 EP 2 GR, AL, US 2 DE 2	MN, SK, ZM, SL, FI, CG,	MK, SI, ZA, SD, ES, CF, 0306 0227 0303 0602 FR, MK,	MG, SG, YU, MZ, EE, BJ, 2003 2003 2004 ES, RO,	MD, SE, VN, MW, DK, BF,	MA, SD, VC, LS, DE, TR, TG A1 A1 A1 DE, LV,	LV, RU, UZ, KE, CZ, SK, TD,	LU, RO, US, GM, CY, SE, SN, 38 BE, SI, 97	LT, PT, UG, GH, CH, NE, 0155 346 3259 481 AT, IE, 2359	1014 2446 2002 1423 R:	CA AU EP	

- ED Entered STN: 28 Feb 2003
- AB The title coatings, resistant to over-baking and yellowing, contain binders curable by phys. processes, heat, and/or radiation and nanoparticles of specified composition containing functional groups activated by radiation, organic coupling groups, metal atoms, and single organic groups. A binder solution containing an 80% solution of 652:383:143:212:21 ethylhexyl acrylate:2-hydroxyethyl acrylate-styrene-4-hydroxybutyl acrylate-acrylic acid copolymer (I) was mixed (1050 parts) with 300 parts Aerosil VP R 7200 and 225 parts BuOAc and milled to give nanoparticles with Grindometer rating 10 μm . Mixing I solution 27.17, nanoparticles 13.1, dipentaerythritol pentaacrylate 20, photoinitiators 2.5, stabilizers 2.4, solvents 33.8, and curing agents (Roskydal UA VPLS, IPDI trimer acrylate, and thinner) 38.28 parts gave a clear dual-cure coating composition with long pot life.
- IC ICM C09D004-00
 - ICS C09D007-12; C09J004-00
- CC 42-10 (Coatings, Inks, and Related Products)
- IT 401793-10-0, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer RL: TEM (Technical or engineered material use); USES (Uses) (coating materials curable by heat and, optionally, radiation)
- IT 1314-13-2, Zinc oxide, uses 1314-23-4, Zinconium dioxide, uses 1344-28-1, Alumina, uses 7439-98-7D, Molybdenum, heteropoly acids 7440-33-7D, Tungsten, heteropoly acids

RL: TEM (Technical or engineered material use); USES (Uses) (nanoparticles; coating materials curable by heat and, optionally, radiation)

IT 401793-10-0, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer RL: TEM (Technical or engineered material use); USES (Uses) (coating materials curable by heat and, optionally, radiation)

RN 401793-10-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 100-42-5 CMF C8 H8 $H_2C \longrightarrow CH \longrightarrow Ph$

CM 5

CRN 79-10-7 CMF C3 H4 O2

HO_C_CH__CH2

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L271 ANSWER 6 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:154482 HCAPLUS Full-text

DOCUMENT NUMBER: 138:206570

TITLE: Coating materials that can be cured thermally and by

actinic radiation, and the use thereof

INVENTOR(S): Rink, Heinz-Peter; Baumgart, Hubert; Conring, Uwe

PATENT ASSIGNEE(S): BASF Coatings AG, Germany SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.					KIND DATE			APPLICATION NO.					DATE			
WO	2003	0163	76		A1		2003	0227	1	wo 2	002-	EP89	85		2	0020	310 <
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	OM,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG,
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
		PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		,	SN,	TD,	ΤG												
	1014				A1												316 <
_	2445	_			A1					_		_	_				310 <
																	810 <
EP																	310 <
	R:	,	,	,	,	,	,	,		,	•	,	,		•	MC,	PT,
			•								•	ВG,					
		-							1	US 2	004-	4837	02		2	0040	113 <
	7098				В2		2006	0829									
RIORIT	ORITY APPLN. INFO.:																816 <
									١	WO 2	002-	EP89	85	١	W 2	0020	310 <

ED Entered STN: 28 Feb 2003

AΒ The invention relates to coating materials that can be cured thermally and by actinic radiation and that comprise (A) at least one binder, selected from the group including the random, alternating and block, linear, branched and comb polyaddn. resins and polycondensation resins that can be cured thermally or thermally and by actinic radiation, and (co)polymers of olefinically unsatd. monomers, and (B) 0.2 to 20 % by weight, based on the solid content of the coating material, of at least one polyisocyanate that is devoid of blocking agents and that is blocked by the internal formation of uretdione groups with breakdown temperature $\leq 160^{\circ}$. The invention also relates to the use of the inventive coating materials for producing single-layer and multilayer clear coats and color- or effect-producing multilayer coatings or as adhesives and sealing materials. A typical coating composition contained 21:652:212:383:143 acrylic acid-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer 35.9, dipentaerythritol pentaacrylate 20, UV absorber 1, hindered amine light stabilizer 1, BuOAc 17.7, Solvent Naphtha 8, Irgacure 184 2, photoinitiators 1.5, Vestagon BF 1540 (uretdione groupcontaining polyisocyanate, free NCO group content <10%, total NCO group content 14.7-16.5%) 13, Roskydal UA VPLS 2337 (isocyanato acrylate) 27.84, IPDI trimer acrylate (NCO group content 6.7%) 6.96, and diluent 3.48 parts.

IC ICM C08G018-79

ICS C09D175-04; C08J003-24

CC 42-10 (Coatings, Inks, and Related Products) Section cross-reference(s): 38

IT 401793-10-0P, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(coating binder; dual cure coating compns. containing internally blocked uretdione-containing polyisocyanates)

IT 401793-10-0P, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(coating binder; dual cure coating compns. containing internally blocked uretdione-containing polyisocyanates)

RN 401793-10-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

HO— (CH₂)₄— O— C— CH—— CH₂

CM 2

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {}^{\text{H2C}} \bigcirc \bigcirc \\ {}^{\text{Me}} - \stackrel{\text{C}}{\text{C}} - \stackrel{\text{C}}{\text{C}} - \bigcirc - \bigcirc + 2 - \bigcirc +$$

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 5

CRN 79-10-7 CMF C3 H4 O2

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L271 ANSWER 7 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:255455 HCAPLUS Full-text

DOCUMENT NUMBER: 138:273060

TITLE: Acrylic aqueous coating compositions with

good durability

INVENTOR(S): Goto, Tokio; Okamoto, Yoshihiro

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2003096390 A 20030403 JP 2001-296411 20010927 <-
PRIORITY APPLN. INFO.: JP 2001-296411 20010927 <--

ED Entered STN: 03 Apr 2003

- Title compns. comprise (A) hydroxy-containing acrylic emulsion polymers with AΒ hydroxy content 20-120 mg-KOH/g (solid base) and (B) water -dispersible polyisocyanates, where the acrylic emulsion polymers contain <20% low mol. weight segment with mol. weight ≤100,000 measured by gel permeation chromatog. using THF eluent and the ratio of isocyanate/hydroxy equivalent is 0.5-2.0. Thus, a composition (NCO/OH = 1.2) comprising 45%-solids acrylic emulsion copolymer with glass transition temperature 25°, hydroxy value 80, and low mol. weight segment with mol. weight $\leq 100,000$ content 8% obtained from Bu acrylate 245, Me methacrylate 540, 2-hydroxyethyl methacrylate 100, 1,4butanediol monoacrylate 100, and acrylic acid 15 parts 608.0, Adekacol W 287 6.6, Noigen EA 120 2.2, diethylene glycol di-Me ether 10.0, Titanix JR 600A 246.5, Bestcide FX 1.0, SN Defoamer 373 1.6, 28% aqueous ammonia 1.0, 10% Adekanol UH 438 aqueous solution 25.0, and 15% aqueous Primal TT 935 thicker 12.0 parts, and Aquanate $\mathbb{A} \cap \mathbb{A}$ 100 was applied on a glass plate to give a coating film with gloss 85%, hardness 78, good water, alkali, acid, solvent, contamination, and accelerated weather resistance.
- IC ICM C09D175-04

CC

- ICS C09D005-02; C09D133-14
 42-7 (Coatings, Inks, and Related Products)
- ST acrylic ac coating compn durability; Aquanate acrylic copolymer coating compn
- IT Polyurethanes, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic; acrylic aqueous coating compns. with good durability)

IT Coating materials

(water-resistant, water-thinned; acrylic ag
. coating compns. with good durability)

IT 503542-62-9P 503542-64-1P 503542-66-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic <u>aqueous</u> coating compns. with good durability)

IT <u>503542-61-8P</u> 503542-63-0P 503542-65-2P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(acrylic aqueous coating compns. with good durability)

IT 503542-62-9P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic aqueous coating compns. with good durability)

- RN 503542-62-9 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with Aquanate 100, butyl 2-propenoate, 4-hydroxybutyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 197808-83-6

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c}
\text{H}_2\text{C} \\
\text{Me} \\
\text{C} \\
\text{C} \\
\text{C}
\end{array}$$
 OMe

CM 6

IT 503542-61-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(acrylic aqueous coating compns. with good durability)

RN 503542-61-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, 4-hydroxybutyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

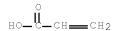
CM 4

CRN 80-62-6 CMF C5 H8 O2



CM 5

CRN 79-10-7 CMF C3 H4 O2



L271 ANSWER 8 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:242077 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 138:256670

TITLE: Multilayer decorative coating including

electrodeposited layer for automobile bodies

INVENTOR(S): Kasahara, Naoko; Ohtani, Takeo; Hiraki, Tadayoshi

PATENT ASSIGNEE(S): Kansai Paint Kabushiki Kaisha, Japan; Kansai Paint

Co., Ltd.

SOURCE: Brit. UK Pat. Appl., 47 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN	NT NO.	KIND	DATE	APPLICATION NO.		DATE
					-	
GB 23	379897	A	20030326	GB 2002-20240		20020830 <
GB 23	379897	В	20050713			
US 20	003102217	A1	20030605	US 2002-227292		20020826 <
CA 23	399751	A1	20030228	CA 2002-2399751		20020827 <
JP 20	003145027	A	20030520	JP 2002-253235		20020830 <
PRIORITY A	APPLN. INFO.:			JP 2001-263647	Α	20010831 <

ED Entered STN: 28 Mar 2003

AB A multilayer coating comprises an <u>cationic</u> electrodeposited <u>pigmented</u> base coating with a clear coat deposited over it. The clear coat has incorporated a specialty <u>pigment</u> for example <u>mica</u> or <u>aluminum</u> flake. The coating may be cured in a two coat-one bake, or a two coat-two bake process. The base coating may comprise an acrylic resin formed by the copolymn. of one or more of a hydroxylated acrylic monomer, an amine containing acrylic monomer, a styrene based monomer and optionally other monomers. The base coating may also comprise the reaction product of an epoxy resin and a carboxyl containing acrylic resin, which is then reacted with an amine to render the resin cationic. The clear coat may comprise an acrylic, a polyester, a silicone, an

```
alkyd or a fluoro resin, which may be applied as a powder or a solvent based
     or an aqueous solution. The coating is intended for coating metal components.
IC
     ICM B05D001-04
     ICS B05D007-00; C09D001-00; C09D005-29; C09D005-44; C09D133-02;
          C09D161-02; C09D163-02; C09D163-10; C25D009-02
CC
     42-10 (Coatings, Inks, and Related Products)
ΙT
     Carbon black, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (pigment; production of multilayer decorative coating including
        electrodeposited layer for automobile bodies)
     Mica-group minerals, uses
ΤТ
     RL: MOA (Modifier or additive use); USES (Uses)
        (white, iron oxide-coated; production of multilayer decorative
        coating including electrodeposited layer for automobile bodies)
     7429-90-5, AlPaste 891K, uses
ΤT
     RL: MOA (Modifier or additive use); USES (Uses)
        (paste, metallic <u>pigment;</u> production of multilayer decorative
        coating including electrodeposited layer for automobile bodies)
     147-14-8, Copper phthalocyanine blue 13463-67-7,
ΙT
     Titanium oxide (TiO2), uses 39283-39-1, Quinacridone red
     RL: MOA (Modifier or additive use); USES (Uses)
        (pigment; production of multilayer decorative coating including
        electrodeposited layer for automobile bodies)
     9003-08-1P, Formaldehyde-melamine polymer
                                                313672-55-8P 454245-66-0P,
ΙT
     Acrylic acid-butyl acrylate-dimethylaminoethyl methacrylate-2-hydroxyethyl
     methacrylate-methyl methacrylate-styrene copolymer
                                                          502612-08-0P
     502612-09-1P, Acrylic acid-2-ethylhexyl methacrylate-methyl
     methacrylate-Placcel FM 3-styrene graft copolymer
                                                        502612-10-4P, Acrylic
     acid-caprolactone-2-ethylhexyl methacrylate-methyl methacrylate-styrene
     graft copolymer 502612-11-5P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (production of multilayer decorative coating including electrodeposited
        layer for automobile bodies)
     502843-94-9, Pearl Mica White
ΙT
     RL: MOA (Modifier or additive use); USES (Uses)
        (production of multilayer decorative coating including electrodeposited
        layer for automobile bodies)
ΙT
     13463-67-7, <u>Titanium</u> oxide (TiO2), uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (pigment; production of multilayer decorative coating including
        electrodeposited layer for automobile bodies)
RN
     13463-67-7 HCAPLUS
CN
     Titanium oxide (TiO2) (CA INDEX NAME)
 0-Ti-0
ΙT
     502612-11-5P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
```

(production of multilayer decorative coating including electrodeposited

2-Propenoic acid, 2-methyl-, 3-[(butoxyhydroxyphosphinyl)oxy]-2-

layer for automobile bodies)

502612-11-5 HCAPLUS

RN

CN

54

hydroxypropyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 165320-79-6 CMF C11 H21 O7 P

CM 2

CRN 24599-21-1 CMF C6 H11 O6 P

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

CRN 688-84-6 CMF C12 H22 O2

CM 6

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L271 ANSWER 9 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:368376 HCAPLUS Full-text

DOCUMENT NUMBER: 136:371112

TITLE: Color- and/or effect-producing multicoat

lacquer, method for production and use thereof

INVENTOR(S): Baumgart, Hubert; Meisenburg, Uwe; Conring, Uwe;

Joost, Karl-Heinz

PATENT ASSIGNEE(S): BASF Coatings A.-G., Germany

SOURCE: PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.				KIND DATE			APPLICATION NO.					DATE				
WO	2002	0382	 87		 A1	_	2002	 0516		 WO 2	 001-:	 EP12	 926		20011108 <		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,
		UZ,	VN,	YU,	ZA,	ZW											
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AM,	AΖ,	BY,	KG,
		KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
		IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,
		GQ,	GW,	${ m ML}$,	MR,	ΝE,	SN,	TD,	ΤG								
DE 10055549				A1 20020529				DE 2000-10055549					20001109 <				
AU 2002016023			A 20020521				AU 2002-16023					20011108 <					

```
CA 2426733
                         Α1
                               20030423
                                          CA 2001-2426733
                                                                 20011108 <--
    EP 1337350
                         Α1
                               20030827
                                          EP 2001-993513
                                                                 20011108 <--
    EP 1337350
                        В1
                               20060830
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    JP 2004512949
                         Τ
                              20040430
                                          JP 2002-540859
                                                                 20011108 <--
    ES 2271108
                         Т3
                               20070416
                                          ES 2001-993513
                                                                 20011108 <--
    MX 2003PA02248
                         Α
                               20030624
                                          MX 2003-PA2248
                                                                 20030314 <--
    US 2004101629
                         A1
                               20040527
                                          US 2003-398894
                                                                 20030409 <--
PRIORITY APPLN. INFO.:
                                          DE 2000-10055549
                                                              A 20001109 <--
                                          WO 2001-EP12926
                                                            W 20011108 <--
```

ED Entered STN: 18 May 2002

- The invention relates to a multicoat lacquer, which may be produced by 1. AΒ application of a filler which hardens thermally, or optionally by actinic radiation, to a substrate and drying the resulting wet layer without complete hardening thereof to give a filler layer, or hardening the above thermally or optionally with actinic radiation to give a filler lacquer; 2. application of a basecoat to the filler layer or filler lacquer, which hardens thermally or optionally by actinic radiation, drying the resulting wet layer without complete hardening thereof to give a basecoat layer, or hardening the above alone or together with the filler layer, thermally or optionally with actinic radiation to give a color- and/or effect-producing base lacquer; 3. application of a multicomponent lacquer to the basecoat layer or basecoat lacquer, hardening the resulting wet layer alone or together with the basecoat layer, or together with the basecoat layer and filler layer, thermally or optionally with actinic radiation to give the multicoat lacquer, whereby the thermal hardening is carried out at <120°. The filler layer may be based on a thermosetting aqueous polyurethane dispersion. The basecoat is based on an aqueous polyurethane or polyacrylate dispersion. The clearcoat is based on a component containing an isocyanate-reactive substance, a radiation-reactive substance, and(or) a isocyanate- and radiation-reactive substance and another component containing a polyisocyanate and(or) compound having ≥1 NCO group and ≥1 radiation-reactive group.
- IC B05D007-00; B05D003-02; C09D175-04
- CC 42-2 (Coatings, Inks, and Related Products)
- ST <u>color</u> producing multilayer coating manuf; filler layer basecoat lacquer topcoat application; dual cure multilayer coating manuf; effect producing multilayer coating manuf; polyacrylate multilayer coating manuf
- IT Polyurethanes, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(<u>color</u>- and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers)

IT Coating materials

(electron-beam-curable, thermosetting and; <u>color</u>- and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers)

IT Coating process

(multilayer; color- and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers)

IT Coating materials

(photocurable, thermosetting and; <u>color</u>— and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers)

IT Coating materials

(thermosetting, photocurable and; <u>color</u>- and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers)

IT 401793-10-0P, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl

acrylate-2-hydroxyethyl methacrylate-styrene copolymer RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process) (coating precursor; color- and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers) 401793-15-5P, Acrylic acid-2-ethylhexyl acrylate-dipentaerythritol pentaacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-Roskydal UA VPLS 2337-styrene copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cured clearcoat; color- and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers) 401793-10-0P, Acrylic acid-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)

(coating precursor; <u>color</u> and/or effect-producing lacquer coatings containing filler layers, basecoat layers, and clearcoat layers) 401793-10-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

ΙT

ΙT

RN

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 103-11-7 CMF C11 H20 O2

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 5

CRN 79-10-7 CMF C3 H4 O2

HO-C-CH-CH2

IT 401793-15-5P, Acrylic acid-2-ethylhexyl acrylate-dipentaerythritol pentaacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-Roskydal UA VPLS 2337-styrene copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(cured clearcoat; color- and/or effect-producing lacquer

coatings containing filler layers, basecoat layers, and clearcoat layers)

RN 401793-15-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-propenoic acid and Roskydal UA-VP-LS 2337 (9CI) (CA INDEX NAME)

CM 1

CRN 334537-56-3

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 60506-81-2 CMF C25 H32 O12

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 103-11-7 CMF C11 H20 O2

CM 6

CRN 100-42-5 CMF C8 H8 $H \supseteq C \longrightarrow CH \longrightarrow Ph$

CM 7

CRN 79-10-7 CMF C3 H4 O2

HO_C_CH__CH2

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L271 ANSWER 10 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:958782 HCAPLUS Full-text

DOCUMENT NUMBER: 138:40791

TITLE: Storage-stable photocurable primer compositions with

abrasion resistance and coating process therewith Okada, Toshikazu; Tomita, Shinji; Nagasao, Tsutomu;

Matoba, Takao

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

INVENTOR(S):

PATENT	NO.	KIND	DATE	APPLICATION NO.	DATE				
JP 2002	2363480	A	20021218	JP 2001-348797	20011114 <				
US 2003	3109595	A1	20030612	20030612 US 2002-207877 2					
US 6844	1029	B2	20050118						
EP 1306	399	A1	20030502	EP 2002-255395	20020801 <				
EP 1306	399	B1	20070328						
R:	AT, BE, C	CH, DE, DK	, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,				
	IE, SI, I	LT, LV, FI	, RO, MK,	CY, AL, TR, BG, CZ,	EE, SK				
CN 1414	1040	A	20030430	CN 2002-128248	20020806 <				
PRIORITY APE	LN. INFO.:	:		JP 2001-106896	A 20010405 <				
				JP 2001-328654	A 20011026 <				
				JP 2001-348797	A 20011114 <				

ED Entered STN: 18 Dec 2002

AB Title compns., which can be applied on photocurable putty compns. by 1-coat-1-bake or 2-coat-1-bake process, comprise acrylic resins containing 0.2-2 mol/kg side-chain unsatd. groups linked through urethane linkages, ≥1 unsatd. group-containing urethane (meth)acrylate oligomers, other polymerizable unsatd. compds., extenders, and photochem. initiators. A primer composition (A) containing isobornyl acrylate, Irgacure 819, Kayamer PM 21, talc, BaSO4, 4-hydroxybutyl acrylate-Sumidur N 3300 oligomer, and Bu methacrylate-iso-Bu methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate-

IC

CC

ΙT

ΙT

ΙT

RN

CN

styrene copolymer adduct with 1:1 IPDI/2-hydroxyethyl acrylate adduct showed good storage stability at 20° for 3 mo. The above A primer was sprayed on a steel plate, UV-cured, lightly abraded, topcoated with Retan PG 80 white, and dried at 60° for 30 min to form a plate showing good coating adhesion initially and after soaking in water for 1 wk. ICM C09D133-00 ICS C09D004-00; C09D005-00; C09D175-16; C09D201-00 42-10 (Coatings, Inks, and Related Products) 478622-32-1P, Butyl methacrylate-isobutyl methacrylate-2hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styreneisobornyl acrylate-4-hydroxybutyl acrylate-Sumidur N 3300-Kayamer PM 21-IPDI-2-hydroxyethyl acrylate 1:1 adduct copolymer 478622-33-2P, Butvl methacrylate-isobutyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styrene-isobornyl acrylate-2-hydroxyethyl acrylate-Sumidur N 3300-2-isocyanatoethyl methacrylate-Kayamer PM 21 copolymer 478622-34-3P, Butyl methacrylate-isobutyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate-isobornyl acrylate-4-hydroxybutyl acrylate-Sumidur N 3300-Kayamer PM 21-IPDI/2-hydroxyethyl acrylate 1:1 adduct copolymer 478622-35-4P, Butyl methacrylate-2-isocyanatoethyl methacrylate-methyl methacrylate-styreneisobornyl acrylate-2-hydroxyethyl acrylate-Sumidur N 3300-Kayamer PM 21 copolymer 478622-36-5P, Butyl methacrylate-2-isocyanatoethyl methacrylate-methyl methacrylate-styrene-isobornyl acrylate-2-hydroxyethyl acrylate-4-hydroxybutyl acrylate-Sumidur N 3300-Kayamer PM 21 copolymer 478622-41-2P, Butyl methacrylate-isobutyl methacrylate-2hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styreneisobornyl acrylate-IPDI-4-hydroxybutyl acrylate-Kayamer PM 21-IPDI/2-hydroxyethyl acrylate 1:1 adduct copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (storage-stable and abrasion-resistant photocurable acrylic polyurethane primers used for photocurable putty) 7727-43-7, Barium sulfate 14807-96-6, Talc, uses RL: TEM (Technical or engineered material use); USES (Uses) (storage-stable and abrasion-resistant photocurable acrylic polyurethane primers used for photocurable putty) 478622-32-1P, Butyl methacrylate-isobutyl methacrylate-2hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styreneisobornyl acrylate-4-hydroxybutyl acrylate-Sumidur N 3300-Kayamer PM 21-IPDI-2-hydroxyethyl acrylate 1:1 adduct copolymer 478622-34-3P , Butyl methacrylate-isobutyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate-isobornyl acrylate-4-hydroxybutyl acrylate-Sumidur N 3300-Kayamer PM 21-IPDI/2-hydroxyethyl acrylate 1:1 adduct copolymer 478622-36-5P, Butyl methacrylate-2isocyanatoethyl methacrylate-methyl methacrylate-styrene-isobornyl acrylate-2-hydroxyethyl acrylate-4-hydroxybutyl acrylate-Sumidur N 3300-Kayamer PM 21 copolymer 478622-41-2P, Butyl methacrylate-isobutyl methacrylate-2-hydroxyethyl methacrylate-methacrylic $\verb|acid-methyl| methacrylate-styrene-isobornyl| acrylate-IPDI-4-hydroxybutyl|$ acrylate-Kayamer PM 21-IPDI/2-hydroxyethyl acrylate 1:1 adduct copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (storage-stable and abrasion-resistant photocurable acrylic polyurethane primers used for photocurable putty) 478622-32-1 HCAPLUS Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate adduct with 5-isocyanato-1-(isocyanatomethyl)-

1,3,3-trimethylcyclohexane (1:1), methyl 2-methyl-2-propenoate,

2-methyl-2-propenoic acid, 2-methylpropyl 2-methyl-2-propenoate, Sumidur N 3300 and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141911-55-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 5888-33-5 CMF C13 H20 O2

Relative stereochemistry.

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {\rm H2C} \\ {\rm Me} \\ {\rm C} \\ {\rm C} \\ {\rm CO} \\ {\rm CH2} \\ {\rm CH2} \\ {\rm CH2} \\ {\rm OH} \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8

$$Me - C - CO_2H$$

CRN 103370-83-8

CMF C12 H20 O5 . \times H3 O4 P

CM 11

CRN 85099-10-1 CMF C12 H20 O5

CM 12

CRN 7664-38-2 CMF H3 O4 P

CM 13

CRN 78724-20-6

CMF C12 H18 N2 O2 . C5 H8 O3

CM 14

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 15

CRN 818-61-1 CMF C5 H8 O3

RN 478622-34-3 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with butyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate adduct with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (1:1), methyl 2-methyl-2-propenoate, 2-methylpropyl 2-methyl-2-propenoate, Sumidur N 3300 and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141911-55-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 5888-33-5 CMF C13 H20 O2

Relative stereochemistry.

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {}^{\rm H2C} \\ {}^{\rm I} \\ {}^{\rm Me} - {}^{\rm C} - {}^{\rm C} - {}^{\rm C} - {}^{\rm CH}_2 - {}^{\rm CH}_2 - {}^{\rm CH}_2 - {}^{\rm CH}_2 \end{array}$$

CRN 97-88-1 CMF C8 H14 O2

CM 6

CRN 97-86-9 CMF C8 H14 O2

CM 7

CRN 80-62-6 CMF C5 H8 O2

CM 8

CRN 103370-83-8

CMF C12 H20 O5 . \times H3 O4 P

CM 9

CRN 85099-10-1 CMF C12 H20 O5

CRN 7664-38-2 CMF H3 O4 P

CM 11

CRN 78724-20-6

CMF C12 H18 N2 O2 . C5 H8 O3

CM 12

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 13

CRN 818-61-1 CMF C5 H8 O3

RN 478622-36-5 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-propenoate,

2-isocyanatoethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, Sumidur N 3300 and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141911-55-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 30674-80-7 CMF C7 H9 N O3

CM 3

CRN 5888-33-5 CMF C13 H20 O2

Relative stereochemistry.

CM 4

CRN 2478-10-6 CMF C7 H12 O3

CM 5

CRN 818-61-1 CMF C5 H8 O3

CRN 100-42-5 CMF C8 H8

H 2 C === CH-Ph

CM 7

CRN 97-88-1 CMF C8 H14 O2

CM 8

CRN 80-62-6 CMF C5 H8 O2

$$^{\text{H}2}^{\text{C}}$$
 $\overset{\circ}{\text{II}}$ $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$

CM 9

CRN 103370-83-8

CMF C12 H20 O5 . \times H3 O4 P

CM 10

CRN 85099-10-1 CMF C12 H20 O5

CRN 7664-38-2 CMF H3 O4 P

RN 478622-41-2 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate adduct with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (1:1), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, methyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid, 2-methylpropyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5888-33-5 CMF C13 H20 O2

Relative stereochemistry.

CM 2

CRN 4098-71-9 CMF C12 H18 N2 O2

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 100-42-5 CMF C8 H8

H 2 C ---- CH-- Ph

CM 6

CRN 97-88-1 CMF C8 H14 O2

CMF C12 H20 O5 .
$$\times$$
 H3 O4 P

CRN 7664-38-2 CMF H3 O4 P

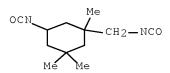
CM 13

CRN 78724-20-6

CMF C12 H18 N2 O2 . C5 H8 O3

CM 14

CRN 4098-71-9 CMF C12 H18 N2 O2



CM 15

CRN 818-61-1 CMF C5 H8 O3

L271 ANSWER 11 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:921290 HCAPLUS Full-text

DOCUMENT NUMBER: 138:14730

TITLE: Laminated sheets having scratch-, acid-, solvent-, and

brushing-resistant glossy topcoat layer for integral

molding

INVENTOR(S): Nagata, Hirotomo; Kawaharada, Yukihiko; Hibi,

Teruyoshi; Komasaki, Shigeru; Takahashi, Katsuji;

Shiota, Koji

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002347179	A	20021204	JP 2001-160513	20010529 <
PRIORITY APPLN. INFO.:			JP 2001-160513	20010529 <

ED Entered STN: 04 Dec 2002

- AB Title sheets, useful for exterior parts of automobiles, elec. appliances, etc., have 3 to 10-μm-thick cured resin layer as a topcoat layer. Practically no cracking, gloss reduction, or whitening is observed in the top coat layer even when the laminated sheet area changes at -10 to 100%. Thus, a composition containing 550:300:150:5 Me methacrylate-Bu methacrylate-2-hydroxyethyl methacrylate-methacrylic acid copolymer (Mw 17,000), Burnock DN 980 (isocyanurate ring-containing polyisocyanate solution), and silica sol was applied on a laminate comprising MTH2 (ABS resin, substrate)/urethane adhesive/transparent IRS 704-MD mixture (PMMA)/ colored HT 03Y (PMMA)/transparent IRS 704-MD mixture and cured to give glossy test pieces, showing 75% rubbing resistance and good 3-dimensional moldability.
- IC ICM B32B027-00 ICS C08G018-62
- CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 38
- IT 35227-05-5P 477602-65-6P 477602-66-7P 477602-67-8F 477602-68-9P, Allyl methacrylate-butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer 477602-69-0P, Allyl methacrylate-butyl methacrylate-2-ethylhexyl methacrylate-2-hydroxyethyl acrylate-methacrylic acid-methyl methacrylate copolymer 477602-70-3P 477602-71-4P, Butyl methacrylate-methacrylic acid-methyl methacrylate-Placcel FM 1 copolymer RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(laminated sheets having scratch-, acid-, solvent-, and brushing-resistant glossy acrylic polyurethane topcoat layer for integral molding)

477602-57-6P, Butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic ΙT acid-methyl methacrylate-Burnock DN 980 copolymer 477602-58-7P, Butyl methacrylate-2-ethylhexyl methacrylate-4-hydroxybutyl acrylate-2isocyanatoethyl 2,6-diisocyanatocaproate-methacrylic acid-methyl methacrylate copolymer 477602-59-8P 477602-60-1P 477602-61-2P, Allyl methacrylate-butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-Burnock DN 980 copolymer 477602-62-3P, Allyl methacrylate-butyl methacrylate-2-ethylhexyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-Placcel FM 1-Burnock DN 477602-63-4P 477602-64-5P 477720-76-6P, Butyl 980 copolymer methacrylate-2-hydroxyethyl methacrylate-2-isocyanatoethyl 2,6-diisocyanatocaproate-methacrylic acid-methyl methacrylate copolymer 477720-77-7P <u>477720-78-8P</u> 477720-79-9P 477720-80-2P 477720-81-3P 477720-82-4P, Butyl methacrylate-2-hydroxyethyl methacrvlate-LTI-methacrvlic acid-methyl methacrvlate copolymer 477720-83-5P, Butyl methacrylate-2-ethylhexyl methacrylate-4-hydroxybutyl acrylate-LTI isocyanate-methacrylic acid-methyl methacrylate copolymer 477720-84-6P 477720-85-7P 477720-86-8P 477720-87-9P 477720-88-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)

(laminated sheets having scratch-, acid-, solvent-, and brushing-resistant glossy acrylic polyurethane topcoat layer for integral molding)

ΙT

477602-67-8P
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(laminated sheets having scratch-, acid-, solvent-, and brushing-resistant glossy acrylic polyurethane topcoat layer for integral molding)

477602-67-8 HCAPLUS RN

Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

СМ 1

CRN 85099-10-1 CMF C12 H20 O5

CM

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM

CRN 688-84-6

CMF C12 H22 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

IT 477720-78-8P 477720-85-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(laminated sheets having scratch-, acid-, solvent-, and brushing-resistant glossy acrylic polyurethane topcoat layer for integral molding)

RN 477720-78-8 HCAPLUS

CN Hexanoic acid, 2,6-diisocyanato-, 2-isocyanatoethyl ester, polymer with 2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 85099-10-1 CMF C12 H20 O5

CRN 69878-18-8 CMF C11 H13 N3 O5

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 688-84-6 CMF C12 H22 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 477720-85-7 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, LTI (isocyanate), methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 183906-32-3 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 85099-10-1 CMF C12 H20 O5

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 688-84-6 CMF C12 H22 O2

CM 6

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-41-4 CMF C4 H6 O2

L271 ANSWER 12 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:686277 HCAPLUS Full-text

DOCUMENT NUMBER: 137:218038

TITLE: Antistatic mold-release materials for hot-pressing

plastic printed circuit boards

INVENTOR(S):
Fukuchi, Yoshihisa

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002254437	A	20020911	JP 2001-60468	20010305 <
PRIORITY APPLN. INFO.:			JP 2001-60468	20010305 <

ED Entered STN: 11 Sep 2002

- The materials comprise Al foils laminated with release layers containing (A) polymers prepared from (a) 1-70% monomers having unsatd. double bonds and polyorganosiloxane chains, (b) 10-50% monomers having unsatd. double bonds and crosslinkable groups, and (c) 0-89% other monomers having unsatd. double bonds and (B) polymers prepared from (d) 10-50% monomers having unsatd. double bonds and crosslinkable groups and (e) 50-90% other monomers having unsatd. double bonds. Thus, a coating containing (a) 4g 3:22:25:50 acrylic acid-Bu methacrylate-4-hydroxybutyl acrylate-Silaplane FM 0721 (acryloxy-half-terminated polysiloxane) graft copolymer, (b) 96 g 1:25:74 acrylic acid-4-hydroxybutyl acrylate-Me methacrylate copolymer, and (c) 34 g Sumidur N 3300 (HDI-based crosslinking agent) was applied on Al foils and heat-cured to give mold-release materials, which were placed on a plastic printed circuit board on both sides and hot-pressed resulting in good releasability and staining resistance.
- IC ICM B29C033-68
 - ICS B29C043-32; B32B015-08; B32B027-00; C08L055-00; C08L101-02; C09K003-00; B29K105-06; B29L031-34
- CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 56, 76

- ST antistatic mold release material aluminum laminate; printed circuit board acrylic polysiloxane polyurethane; acrylic butyl hydroxybutyl polysiloxane methyl HDI polymer
- IT 457049-32-0P 457049-33-1P 457049-34-2P 457049-35-3P 457049-36-4P
 - RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)
 - (antistatic mold-release materials for hot-pressing plastic printed circuit boards)
- IT 7429-90-5, Aluminum, uses
 - RL: NUU (Other use, unclassified); USES (Uses)
 - (antistatic mold-release materials for hot-pressing plastic printed circuit boards)
- IT <u>457049-33-1P</u> <u>457049-34-2P</u>
 - RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)
 - (antistatic mold-release materials for hot-pressing plastic printed circuit boards)
- RN 457049-33-1 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with

 $\alpha\text{-}[\text{dimethyl}[3\text{-}[(1\text{-}\text{oxo-}2\text{-}\text{propenyl})\,\text{oxy}]\text{propyl}]\text{silyl}]-\omega\text{-}[(\text{trimethylsilyl})\,\text{oxy}]\text{poly}[\text{oxy}(\text{dimethylsilylene})], 4\text{-hydroxybutyl} 2\text{-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl} 2\text{-methyl-}2\text{-propenoate, 2-propenoic acid and Sumidur N 3300 (9CI)} (CA INDEX NAME)$

CM 1

CRN 157047-66-0

CMF (C2 H6 O Si)n C11 H24 O3 Si2

CCI PMS

$$H_2C = CH - C - O - (CH_2)_3 - Si - C - O - SiMe_3$$

CM 2

CRN 141911-55-9

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 2478-10-6

CMF C7 H12 O3

CM 4

CRN 868-77-9

CMF C6 H10 O3

CM 5

CRN 97-88-1

CMF C8 H14 O2

CM 6

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-10-7 CMF C3 H4 O2

RN 457049-34-2 HCAPLUS

CM 1

CRN 141911-55-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2

CCI PMS

CRN 2478-10-6 CMF C7 H12 O3

CRN 868-77-9 CMF C6 H10 O3

CRN 97-88-1 CMF C8 H14 O2

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

L271 ANSWER 13 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:654491 HCAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 137:187104

TITLE: Water-thinned coating compositions with

water resistance and appearance

INVENTOR(S): Fukuzumi, Tatsushi; Iwamoto, Akitada PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002241681	А	20020828	JP 2001-36479	20010214 <
PRIORITY APPLN. INFO.:			JP 2001-36479	20010214 <

ED Entered STN: 29 Aug 2002

- AB The composition comprises a copolymer with acid value 30-70 mgKOH/g, hydroxyl value 30-100 mgKOH/g and number average mol. weight 10,000-30,000 having \geq 40% ethylencally unsatd. monomer with solubility in water (20°) \leq 0.5% and glass transition temperature of its homopolymer \geq 0°. Thus, 150 parts 40/27/13.2/3.8/11/5 cyclohexyl methacrylate-Bu methacrylate-Et acrylate-acrylic acid-4-hydroxybutyl acrylate-Blemmer 70PEP-350B (ethylene oxide-propylene oxide copolymer monomethacrylate) copolymer was mixed with Cymel 325 (amino resin) 25, Alpaste 0539X 10 and butylcellosolve 30 parts to give a metallic coating, which was coated on an aminoalkyd resin-coted steel plate, and then spray coated an acrylic coating to give a test piece showing smooth appearance and water resistance.
- IC ICM C09D157-10 ICS C09D005-00
- CC 42-7 (Coatings, Inks, and Related Products)
- ST acrylic metallic coating <u>water</u> thinned appearance; <u>water</u> resistance aminoplast acrylic coating
- IT Aminoplasts

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic; water-thinned coating compns. with water

resistance and appearance)

IT Coating materials

(metal; water-thinned coating compns. with water
resistance and appearance)

IT Aminoplasts

```
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (polymers with acrylic polymers; water-thinned coating
        compns. with water resistance and appearance)
ΙT
     Coating materials
        (water-thinned; water-thinned coating compns. with
        water resistance and appearance)
ΙT
     7429-90-5, Aluminum, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (Alpaste 0539X; water-thinned coating compns. with
        water resistance and appearance)
     97-88-1DP, Butyl methacrylate, polymers with acrylic monomers and melamine
ΙT
             448235-77-6P 448235-79-8P, Butyl methacrylate-cyclohexyl
     methacrylate-2-ethylhexyl methacrylate-4-hydroxybutyl acrylate-2-
     hydroxyethyl acrylate-methacrylic acid copolymer dimethylethanolamine salt
     448235-83-4P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP
     (Preparation); USES (Uses)
        (water-thinned coating compns. with water
        resistance and appearance)
     79-41-4DP, Methacrylic acid, C12-13 alkyl esters, polymers with acrylic
ΙT
     monomers and melamine resin 79-41-4DP, Methacrylic acid, polymers with
     acrylic monomers and melamine resin 97-63-2DP, Ethyl methacrylate,
     polymers with acrylic monomers and melamine resin 100-42-5DP, Styrene,
     polymers with acrylic monomers and melamine resin 101-43-9DP, Cyclohexyl
     methacrylate, polymers with acrylic monomers and melamine resin
     140-88-5DP, Ethyl acrylate, polymers with acrylic monomers and melamine
            688-84-6DP, 2-Ethylhexyl methacrylate, polymers with acrylic
     resin
     monomers and melamine resin 868-77-9DP, 2-Hydroxyethyl methacrylate,
     polymers with acrylic monomers and melamine resin 2478-10-6DP,
     4-Hydroxybutyl acrylate, polymers with acrylic monomers and melamine resin
     9003-08-1DP, Cymel 325, polymers with acrylic polymers
     448235-81-2P 448235-85-6P 448242-37-3P, Acrylic
     acid-Blemmer 70PEP-350B-butyl methacrylate-cyclohexyl methacrylate-Cymel
     325-ethyl acrylate-4-hydroxybutyl acrylate copolymer dimethylethanolamine
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (water-thinned coating compns. with water
        resistance and appearance)
     448235-79-8P, Butyl methacrylate-cyclohexyl methacrylate-2-
ΙT
     ethylhexyl methacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl
     acrylate-methacrylic acid copolymer dimethylethanolamine salt
     448235-83-4P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP
     (Preparation); USES (Uses)
        (water-thinned coating compns. with water
        resistance and appearance)
RN
     448235-79-8 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate,
     cyclohexyl 2-methyl-2-propenoate, 2-ethylhexyl 2-methyl-2-propenoate,
     4-hydroxybutyl 2-propenoate and 2-hydroxyethyl 2-propenoate, compd. with
     2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)
     СМ
          1
     CRN 108-01-0
     CMF C4 H11 N O
```

CRN 448235-78-7

(C12 H22 O2 . C10 H16 O2 . C8 H14 O2 . C7 H12 O3 . C5 H8 O3 . C4 H6 CMF

CCI PMS

CM 3

CRN 2478-10-6

CMF C7 H12 O3

CM 4

CRN 818-61-1

CMF C5 H8 O3

CM 5

CRN 688-84-6

CMF C12 H22 O2

CM 6

CRN 101-43-9

CMF C10 H16 O2

$$\underbrace{ \text{O} \overset{\text{O}}{\text{L}} \overset{\text{CH} 2}{\text{L}} }_{\text{Me}}$$

CRN 97-88-1 CMF C8 H14 O2

CM 8

CRN 79-41-4 CMF C4 H6 O2

RN 448235-83-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, ethyl 2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O

M = 2 N - C H 2 - C H 2 - O H

CM 2

CRN 448235-82-3

CMF (C12 H22 O2 . C10 H16 O2 . C8 H14 O2 . C8 H8 . C7 H13 N O4 S . C7 H12

$$\mbox{O3}$$
 . C6 H10 O3 . C5 H8 O2 . C4 H6 O2)×

CRN 140-88-5 CMF C5 H8 O2

CM 8

CRN 101-43-9 CMF C10 H16 O2

CM 9

CRN 100-42-5 CMF C8 H8

H 2 C ___ C H __ P h

CM 10

CRN 97-88-1 CMF C8 H14 O2

CM 11

CRN 79-41-4 CMF C4 H6 O2

IT 448235-81-2P 448235-85-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (water-thinned coating compns. with water

resistance and appearance)

RN 448235-81-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, 2-ethylhexyl 2-methyl-2-propenoate, formaldehyde, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-propenoate and 1,3,5-triazine-2,4,6-triamine, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O

Me2N-CH2-CH2-OH

CM 2

CRN 448235-80-1

CMF (C12 H22 O2 . C10 H16 O2 . C8 H14 O2 . C7 H12 O3 . C5 H8 O3 . C4 H6 O2 . C3 H6 N6 . C H2 O)×

CCI PMS

CM 3

CRN 2478-10-6 CMF C7 H12 O3

HO— (CH2) 4— O— C— CH—— CH2

CM 4

CRN 818-61-1 CMF C5 H8 O3

CRN 688-84-6 CMF C12 H22 O2

CM 6

CRN 108-78-1 CMF C3 H6 N6

CM 7

CRN 101-43-9 CMF C10 H16 O2

CM 8

CRN 97-88-1 CMF C8 H14 O2

CRN 79-41-4 CMF C4 H6 O2

CM 10

CRN 50-00-0 CMF C H2 O

H 2 C==O

RN 448235-85-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, ethyl 2-propenoate, formaldehyde, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 1,3,5-triazine-2,4,6-triamine, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O

 $\texttt{M} \in \texttt{2} \, \texttt{N} \, \boldsymbol{\longleftarrow} \, \texttt{C} \, \texttt{H} \, \texttt{2} \, \boldsymbol{\longleftarrow} \, \texttt{C} \, \texttt{H} \, \texttt{2} \, \boldsymbol{\longleftarrow} \, \texttt{O} \, \texttt{H}$

CM 2

CRN 448235-84-5

CMF (C12 H22 O2 . C10 H16 O2 . C8 H14 O2 . C8 H8 . C7 H13 N O4 S . C7 H12 O3 . C6 H10 O3 . C5 H8 O2 . C4 H6 O2 . C3 H6 N6 . C H2 O)x

CCI PMS

CM 3

CRN 15214-89-8 CMF C7 H13 N O4 S

CM 4

CRN 2478-10-6 CMF C7 H12 O3

CM 5

CRN 868-77-9 CMF C6 H10 O3

CM 6

CRN 688-84-6 CMF C12 H22 O2

CM 7

CRN 140-88-5

CMF C5 H8 O2

CM 8

CRN 108-78-1 CMF C3 H6 N6

CM 9

CRN 101-43-9 CMF C10 H16 O2

CM 10

CRN 100-42-5 CMF C8 H8

H 2 C ___ C H __ P h

CM 11

CRN 97-88-1 CMF C8 H14 O2

CRN 79-41-4 CMF C4 H6 O2

CM 13

CRN 50-00-0 CMF C H2 O

H 2 C-O

L271 ANSWER 14 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:396451 HCAPLUS Full-text

DOCUMENT NUMBER: 136:403191

TITLE: wet-on-wet coating process and multilayer coatings

without interlayer contamination

INVENTOR(S): Okuma, Koji; Tsujioka, Hideaki; Kobayashi, Keiko PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002153807	A	20020528	JP 2000-353364	20001120 <
PRIORITY APPLN. INFO.:			JP 2000-353364	20001120 <

ED Entered STN: 28 May 2002

AB The process includes successively applying inner coatings containing acrylic polymers bearing amido groups and polyester polyols, base coatings containing the acrylic polymers, and clear coatings. Thus, a galvanized plate was electrodeposited with Power Top V 6; successively coated with an inner coating containing Placcel 305 (polycaprolactone triol) 20, Tipaque CR 97 (TiO2) 39.5, styrene (I)-Me methacrylate (II)-4-hydroxybutyl acrylate-Et acrylate (III)-Et methacrylate (IV)-methacrylic acid (V)-acrylamide copolymer (VI) 36, I-II-III-IV-V-2-hydroxyethyl methacrylate copolymer (VII) 24, and U-Van 226 (butylated

melamine resin) 20 parts; a base coating containing Alpaste 7160N (Al pigment) 10, VI 42, VII 28, U-Van 20N6 (butylated melamine resin) 30, and an emulsion containing styrene-ethylene glycol dimethacrylate copolymer and azelaic acid-bishydroxyethyltaurin-neopentyl glycol-phthalic anhydride copolymer Cardura E 10 (glycidyl neodecanoate) ester 10 parts; and MAC-O 380 Clear (a clear coating); and baked to give a coating showing good appearance.

- IC ICM B05D001-36
 - ICS B05D007-14; B05D007-24; C09D005-00; C09D133-24; C09D167-00
- CC 42-2 (Coatings, Inks, and Related Products)
- IT 431046-53-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

- IT 431881-56-0P
 - RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked, inner coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

- IT 431060-05-8P, Azelaic acid-N,N-bis(2-hydroxyethyl)taurine-neopentyl glycol-phthalic anhydride copolymer, ester with Cardura E 10 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (thickeners on base coatings; wet-on-wet coating process for multilayer
 - coatings without interlayer contamination)
- IT 431046-53-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

- RN 431046-53-6 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, formaldehyde, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-propenamide and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 108-78-1 CMF C3 H6 N6

CM 5

CRN 100-42-5 CMF C8 H8

H 2 C — CH— Ph

CM 6

CRN 97-90-5 CMF C10 H14 O4

CM 7

CRN 97-63-2

CMF C6 H10 O2

CM 8

CRN 80-62-6 CMF C5 H8 O2

CM 9

CRN 79-41-4 CMF C4 H6 O2

CM 10

CRN 79-06-1 CMF C3 H5 N O

CM 11

CRN 50-00-0 CMF C H2 O

H 2 C==O

IT 431881-56-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked, inner coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

RN 431881-56-0 HCAPLUS

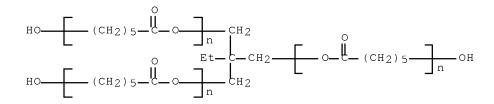
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, ethyl
2-methyl-2-propenoate, ethyl 2-propenoate, formaldehyde,
α-hydro-ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)] ether with
2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 4-hydroxybutyl
2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl
2-methyl-2-propenoate, 2-propenamide and 1,3,5-triazine-2,4,6-triamine
(9CI) (CA INDEX NAME)

CM 1

CRN 54735-63-6

CMF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H14 O3

CCI PMS



CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {\rm H2C} \quad {\rm O} \\ {\rm Me} = \begin{array}{c} {\rm C} \\ {\rm C} \\ {\rm C} \\ {\rm O} \end{array} \\ {\rm CH2} = {\rm CH2} = {\rm CH2} \\ {\rm OH2} \end{array}$$

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 108-78-1 CMF C3 H6 N6

CM 6

CRN 100-42-5 CMF C8 H8

$$H_2C \longrightarrow CH \longrightarrow Ph$$

CM 7

CRN 97-63-2 CMF C6 H10 O2

CM 8

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CM 10

CRN 79-06-1 CMF C3 H5 N O

CM 11

CRN 50-00-0 CMF C H2 O

H 2 C==O

L271 ANSWER 15 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:397634 HCAPLUS Full-text

DOCUMENT NUMBER: 136:403194

TITLE: Wet-on-wet coating process and multilayer coatings

without interlayer contamination

INVENTOR(S): Okuma, Koji; Tsujioka, Hideaki; Kobayashi, Keiko PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002153806	A	20020528	JP 2000-353363	20001120 <
PRIORITY APPLN. INFO.:			JP 2000-353363	20001120 <

ED Entered STN: 28 May 2002

- AΒ The process includes successively applying inner and base coatings containing acrylic polymers bearing amido groups and curing agents and clear coatings, wherein the curing agents comprise active methylene-blocked aliphatic isocyanates (average number of functional groups >3) in the inner coating. Thus, a galvanized plate was electrodeposited with Power Top V6; successively coated with an inner coating containing Tipaque CR 97 (TiO2) 39.5, styrene (I)-Me methacrylate (II)-4-hydroxybutyl acrylate-Et acrylate (III)-Et methacrylate (IV)-methacrylic acid (V)-acrylamide copolymer (VI) 63, and Duranate MFK 60X (blocked HDI) 37 parts; a base coating containing Alpaste 7160N (Al pigment) 10, VI 42, I-II-III-IV-V-2-hydroxyethyl methacrylate copolymer 28, U-Van 20N6 (butylated melamine resin) 30, and an emulsion containing styrene-ethylene glycol dimethacrylate copolymer and azelaic acidbishydroxyethyltaurin-neopentyl glycol-phthalic anhydride copolymer Cardura E 10 (glycidyl neodecanoate) ester 10 parts; and MAC-O 380 Clear (clear coating); and baked to give a coating showing good appearance and chipping resistance.
- IC ICM B05D001-36 ICS B05D007-14; B05D007-24; C09D005-00; C09D175-04
- CC 42-2 (Coatings, Inks, and Related Products)
- IT 431046-53-6P, Acrylamide-ethyl acrylate-ethylene glycol dimethacrylate-ethyl methacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styrene-U-Van 20N60 copolymer
 - RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)
- IT 431060-05-8P, Azelaic acid-bis(hydroxyethyl)taurine-neopentyl glycol-phthalic anhydride copolymer, ester with Cardura E 10 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (thickeners on base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)
- IT 431046-53-6P, Acrylamide-ethyl acrylate-ethylene glycol dimethacrylate-ethyl methacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styrene-U-Van 20N60 copolymer
 - RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)
- RN 431046-53-6 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, formaldehyde, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-propenamide and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 108-78-1 CMF C3 H6 N6

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CRN 97-90-5 CMF C10 H14 O4

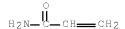
CRN 97-63-2 CMF C6 H10 O2

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CM 10

CRN 79-06-1 CMF C3 H5 N O



CRN 50-00-0 CMF C H2 O

H 2 C-O

L271 ANSWER 16 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:397633 HCAPLUS Full-text

DOCUMENT NUMBER: 136:403193

TITLE: Wet-on-wet coating process and multilayer coatings

without interlayer contamination

INVENTOR(S): Okuma, Koji; Tsujioka, Hideaki; Kobayashi, Yoshiko PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002153805	А	20020528	JP 2000-353362	20001120 <
PRIORITY APPLN. INFO.:			JP 2000-353362	20001120 <

ED Entered STN: 28 May 2002

AΒ The process includes successively applying inner and base coatings containing acrylic polymers bearing amido groups and curing agents and clear coatings, wherein the curing agents comprise aminoplasts and blocked aliphatic isocyanates (average number of functional groups >3) in the inner coatings. Thus, a galvanized plate was electrodeposited with Power Top V6; successively coated with an inner coating containing Tipaque CR 97 (TiO2) 39.5, styrene (I)-Me methacrylate (II)-4-hydroxybutyl acrylate-Et acrylate (III)-Et methacrylate (IV)-methacrylic acid (V)-acrylamide copolymer (VI) 43, I-II-III-IV-V-2-hydroxyethyl methacrylate copolymer (VII) 29, U-Van 226 (butylated melamine resin) 18, Duranate ME 20 B 80S (oxime-blocked HDI) 10 parts; a base coating containing Alpaste 7160N (Al pigment) 10, VI 42, VII 28, U-Van 20N6 (butylated melamine resin) 30, and an emulsion containing styrene-ethylene glycol dimethacrylate copolymer and azelaic acid-bishydroxyethyltaurinneopentyl glycol-phthalic anhydride copolymer Cardura E 10 (glycidyl neodecanoate) ester 10 parts; and MAC-O 380 Clear (clear coating); and baked to give a coating showing good appearance and chipping resistance.

IC ICM B05D001-36

ICS B05D007-14; B05D007-24; C09D133-26; C09D161-20; C09D175-04

- CC 42-2 (Coatings, Inks, and Related Products)
- IT 431046-53-6E

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

IT 431878-88-5P, Acrylamide-ethyl acrylate-ethyl methacrylate-formaldehyde-HDI-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-melamine-methacrylic acid-methyl methacrylate-styrene copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked, inner coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

IT 431060-05-8P, Azelaic acid-bis(hydroxyethyl)taurin-neopentyl glycol-phthalic anhydride copolymer, ester with Cardura E 10
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (thickeners on base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

IT 431046-53-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (base coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

RN 431046-53-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, formaldehyde, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-propenamide and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 140-88-5 CMF C5 H8 O2

CRN 108-78-1 CMF C3 H6 N6

CM 5

CRN 100-42-5 CMF C8 H8

$$H_2C \longrightarrow CH - Ph$$

CM 6

CRN 97-90-5 CMF C10 H14 O4

CM 7

CRN 97-63-2 CMF C6 H10 O2

H 2 C-O

IT 431878-89-59, Acrylamide-ethyl acrylate-ethyl methacrylate-formaldehyde-HDI-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-melamine-methacrylic acid-methyl methacrylate-styrene copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked, inner coatings; wet-on-wet coating process for multilayer coatings without interlayer contamination)

RN 431878-88-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,6-diisocyanatohexane, ethenylbenzene, ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, formaldehyde, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-propenamide and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 822-06-0 CMF C8 H12 N2 O2

CM 4

CRN 140-88-5 CMF C5 H8 O2

$$H_2C \longrightarrow CH - Ph$$

CRN 79-06-1 CMF C3 H5 N O

CM 11

CRN 50-00-0 CMF C H2 O

H 2 C==O

L271 ANSWER 17 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:885899 HCAPLUS Full-text

DOCUMENT NUMBER: 136:38902

TITLE: Method for producing multilayer clearcoats with

color- or effect-imparting properties

INVENTOR(S): Farwick, Thomas; Zumbrink, Andrea; Roeckrath, Ulrike;

Roters, Annette; Baumgart, Hubert

PATENT ASSIGNEE(S): BASF Coatings A.-G., Germany

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIN	D	DATE		i	APPL:	ICAT	ION I	.OV		Di	ATE			
	2001				A2 A3		2001 2002		1	WO 2	001-	EP62	28		2	0010	601	<
	₩:	CR, HU,	CU, ID,	CZ, IL,	DE, IN,	DK, IS,	AU, DM, JP, MK,	DZ, KE,	EE, KG,	ES, KP,	FI, KR,	GB, KZ,	GD, LC,	GE, LK,	GH, LR,	GM, LS,	HR, LT,	
	₽W•	SD, YU, CI,	SE, ZA, CM,	SG, ZW, GA,	SI, SZ, GN,	SK, BE, GW,	SL, CY, ML,	TJ, FR, MR,	TM, GR, NE,	TR, IE, SN,	TT, IT, TD,	TZ, MC, TG	UA, NL,	UG, BF,	US, BJ,	UZ, CF,	VN, CG,	

```
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     DE 10027268
                         Α1
                                20011213
                                           DE 2000-10027268
                                                                   20000602 <--
     AU 2001072444
                          Α
                                20011211
                                            AU 2001-72444
                                                                   20010601 <--
PRIORITY APPLN. INFO.:
                                            DE 2000-10027268
                                                                A 20000602 <--
                                                                W 20010601 <--
                                            WO 2001-EP6228
ΕD
     Entered STN: 07 Dec 2001
AΒ
     Multilayer clearcoats, useful in color- and/or effect-imparting multilayer
     coats, are prepared by applying a first clearcoat, drying the resulting first
     clearcoat layer without or without curing, applying a second clearcoat that
     differs in composition from the first clearcoat and curing the first and the
     second clearcoat layer together, or, alternatively, curing the second
     clearcoat layer sep. The binder in the second clearcoat contains a siloxane-
     group-free (meth)acrylate copolymer that contains ≤90 weight% hydroxy group-
     containing monomers. 10 To 90 weight% of these monomers are 4-
     hydroxybutyl (meth) acrylate and/or 2-alkyl-propane-1,3-diol mono(meth) acrylate
     and 0 to 45 weight% other hydroxyl-group containing monomers. The second
     clearcoat further contains tris(alkoxycarbonylamino)triazine as the
     crosslinking agent, and the first and second clearcoats do not contain
     tricyclodecane dimethanol.
IC
     ICM B05D
     42-7 (Coatings, Inks, and Related Products)
CC
ΙT
     Transparent materials
        (coatings; preparation of multilayer siloxane-free (meth)acrylic clearcoats
        with <u>color-</u> or effect-imparting properties)
ΙT
     Crosslinking agents
        (preparation of multilayer siloxane-free (meth)acrylic clearcoats with
        color- or effect-imparting properties)
ΙT
     Coating materials
        (transparent; preparation of multilayer siloxane-free (meth)acrylic
        clearcoats with color- or effect-imparting properties)
     194879-63-5, Tact
ΙT
                         380239-44-1
     RL: RCT (Reactant); TEM (Technical or engineered material use); RACT
     (Reactant or reagent); USES (Uses)
        (crosslinker; preparation of multilayer siloxane-free (meth)acrylic
        clearcoats with color- or effect-imparting properties)
     173027-63-9P, Acrylic acid-butyl methacrylate-2-ethylhexyl
ΤТ
     methacrvlate-4-hydroxybutyl acrvlate-2-hydroxyethyl acrylate-styrene
     copolymer 289911-92-8F, Acrylic acid-butyl acrylate-butyl
     methacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl acrylate-styrene
     copolymer 379705-39-2P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (preparation of multilayer siloxane-free (meth)acrylic clearcoats with
        color- or effect-imparting properties)
     173027-63-9P, Acrylic acid-butyl methacrylate-2-ethylhexyl
ΙT
     methacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl acrylate-styrene
     copolymer 289911-92-8P, Acrylic acid-butyl acrylate-butyl
     methacrylate-4-hydroxybutyl acrylate-2-hydroxyethyl acrylate-styrene
     copolymer 379705-39-2P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (preparation of multilayer siloxane-free (meth)acrylic clearcoats with
        color- or effect-imparting properties)
RN
     173027-63-9 HCAPLUS
     2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene,
CN
```

2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate,

2-hydroxyethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CRN 818-61-1 CMF C5 H8 O3

CRN 688-84-6 CMF C12 H22 O2

CRN 100-42-5 CMF C8 H8

CM 5

CRN 97-88-1 CMF C8 H14 O2

CRN 79-10-7 CMF C3 H4 O2

RN 289911-92-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 818-61-1 CMF C5 H8 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$H_2C \longrightarrow CH \longrightarrow Ph$$

RN 379705-39-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate and 4-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {\rm H2C} \\ {\rm Me} \\ {\rm C} \\ {\rm C} \\ {\rm CO} \\ {\rm CH2} \\ {\rm CH2} \\ {\rm CH2} \\ {\rm OH} \end{array}$$

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 100-42-5 CMF C8 H8

H 2 C ___ C H __ P h

L271 ANSWER 18 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:767327 HCAPLUS Full-text

DOCUMENT NUMBER: 135:305246

TITLE: Coating process of cationic resin

compositions on metal substrate parts having welded

portions

INVENTOR(S): Masaki, Yuji; Sakai, Makoto; Miyake, Haruaki;

Funakoshi, Fumio

PATENT ASSIGNEE(S): Honda Motor Co., Ltd., Japan; Nippon Paint Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001293432	A	20011023	JP 2000-109488	20000411 <

PRIORITY APPLN. INFO.:

JP 2000-109488

20000411 <--

ED Entered STN: 23 Oct 2001

- AΒ The cationic compns. containing 100 parts mixts. of amino-substituted epoxy resins 7-30, amino-substituted acrylic resins 48-62, and aliphatic blocked polyisocyanates 22-25% and 1-7 parts powdered carbon black with particle diameter (D) ≤ 15 nm are applied on areas except the welded regions on the metal parts by electrodeposition, sep. applied on the welded regions by spraying, and then the whole coated area is baked. The welded portions, which are difficult to be electrodeposited because of elec. insulating property of so-called slag, can be effectively coated with the cationic compns. to show good corrosion and weathering resistance. Thus, a copolymer of 351.6 parts epoxy resin (Epon 828) and 99.2 parts bisphenol A, 196.5 parts (as solids) 2ethylhexanol-half-blocked isophorone diisocyanate, 136.0 parts (as solids) 1-(2-hydroxyethylthio)-2-propanol (SHP 100), and 134.0 parts dimethylolpropionic acid were reacted to give tertiary sulfonium-containing epoxy resin, which was mixed with 17 parts carbon black (D 13 nm) to give a pigment paste. Sep., bisphenol A epoxy resin (Epotohto YD 014) 950, N-methylethanolamine 60, and 73% diethylenetriamine Me iso-Bu ketone ketimine Me iso-Bu ketone solution 73 parts were reacted to give an amino-substituted epoxy resin solution, 120.4 parts of which was mixed with 56.2 parts solution of Me Et ketoxime-blocked isophorone diisocvanate and diluted with acidic water to give an emulsion (A). Then, 16.0:4.2:14.8:58.1:6.9 glycidyl methacrylate-2-hydroxyethyl methacrylate-2-hydroxypropyl methacrylate-Bu methacrylate-tert-Bu methacrylate copolymer modified with 8.5 parts N-methylethanolamine was mixed with 44.6 parts Me Et ketoxime-blocked isophorone diisocyanate and 33.6 parts 627:191:182:300:200 Me methacrylate-lauryl methacrylate-4- hydroxybutyl acrylate-2-methoxyethyl acrylate-Bu methacrylate copolymer to give an emulsion, 727 parts of which was mixed with 152 parts of the pigment paste and 606 parts of the emulsion A, diluted with water, applied on a bicycle frame, and baked to give a test piece showing $\geq 80\%$ retention of initial 60° gloss after 400-h exposure to sunshine weather-O-meter.
- IC ICM B05D007-14
 - ICS B05D001-02; B05D003-10; B05D007-24; C09D133-14; C09D163-00; C09D175-04; C25D013-00; C25D013-06
- CC 42-2 (Coatings, Inks, and Related Products) Section cross-reference(s): 55, 57
- ST electrodeposition spray coating process welded part; anticorrosive weather resistant coating electrodeposition spraying; cationic epoxy resin electrodeposition coating; carbon black amino modified epoxy resin coating; blocked polyisocyanate epoxy resin electrodeposition coating; acrylic resin amino modified electrodeposition coating; bicycle frame electrodeposition spray coating process
- IT Epoxy resins, uses

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(acrylic; electrodeposition and spray coating of <u>cationic</u> resin compns. on metal substrate parts having welded portions) Coating materials

(anticorrosive; electrodeposition and spray coating of <u>cationic</u> resin compns. on metal substrate parts having welded portions)

IT Galvanized steel

RL: MSC (Miscellaneous)

(bicycle frame; electrodeposition and spray coating of <u>cationic</u> resin compns. on metal substrate parts having welded portions)

IT Electrodeposition

(electrodeposition and spray coating of <u>cationic</u> resin compns. on metal substrate parts having welded portions)

IT Bicycles

ΙT

(electrodeposition and spray coating of <u>cationic</u> resin compns. on metal substrate parts having welded portions in)

ΙT Carbon black, uses RL: MOA (Modifier or additive use); USES (Uses) (pigments; in electrodeposition and spray coating of cationic resin compns. on metal substrate parts having welded portions) ΙT Coating process (spray; electrodeposition and spray coating of cationic resin compns. on metal substrate parts having welded portions) ΙT Coating materials (weather-resistant; electrodeposition and spray coating of cationic resin compns. on metal substrate parts having welded portions) 366782-94-7P ΙT RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (electrodeposition and spray coating of cationic resin compns. on metal substrate parts having welded portions) 366782-94-7P ΙT RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (electrodeposition and spray coating of <u>cationic</u> resin compns. on metal substrate parts having welded portions) RN 366782-94-7 HCAPLUS 2-Propenoic acid, 2-methyl-, butyl ester, polymer with CN N-(2-aminoethyl)-1, 2-ethanediamine, (chloromethyl) oxirane,1,1-dimethylethyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 1-[(2-hydroxyethyl)thio]-2-propanol, 3-hydroxy-2-(hydroxymethyl)-2methylpropanoic acid, 2-hydroxypropyl 2-methyl-2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-methoxyethyl 2-propenoate, 2-(methylamino)ethanol, 4,4'-(1methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) СМ 1 CRN 6713-03-7 CMF C5 H12 O2 S Me-CH2-CH2-CH2-CH2-OH CM CRN 4767-03-7 CMF C5 H10 O4

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 4

CRN 3121-61-7 CMF C6 H10 O3

CM 5

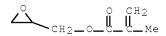
CRN 2478-10-6 CMF C7 H12 O3

CM 6

CRN 923-26-2 CMF C7 H12 O3

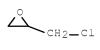
$$\verb|H2N--CH2--CH2--NH--CH2--CH2--NH2|\\$$

CRN 106-91-2 CMF C7 H10 O3



CM 13

CRN 106-89-8 CMF C3 H5 C1 O



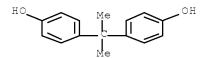
CM 14

CRN 97-88-1 CMF C8 H14 O2

CM 15

CRN 80-62-6 CMF C5 H8 O2

CRN 80-05-7 CMF C15 H16 O2



L271 ANSWER 19 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:459783 HCAPLUS Full-text

DOCUMENT NUMBER: 135:68575

TITLE: <u>Water</u>-resistant recording sheets for

aqueous inks

INVENTOR(S): Shimizu, Tetsuya; Fujita, Hiroyuki
PATENT ASSIGNEE(S): Hitachi Kasei Polymer Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001171230	A	20010626	JP 1999-376739	19991220 <
PRIORITY APPLN. INFO.:			JP 1999-376739	19991220 <

ED Entered STN: 26 Jun 2001

AB The sheets have ink absorbing layers containing 100:0.1-100:3 mixture of (A) water-insol. cationic polymers containing 5-15 weight% (based on solid polymer) quaternary ammonium (meth)acrylic monomers and 20-40 weight% N-vinylpyrrolidone and (B) water-soluble cationic polymers having amidine structures. The sheets may especially be those for ink-jet printing.

IC ICM B41M005-00 ICS B41J002-01

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST water resistant recording sheet ag ink; ink jet recording sheet full color; amidine cationic polymer ink absorbing layer; quaternary ammonium acrylic polymer ink absorbing layer

IT Polyelectrolytes

(<u>cationic</u>; <u>water</u>-resistant recording sheets having <u>aqueous</u> ink-absorbing layers containing <u>water</u>-insol. <u>cationic</u> polymers and <u>water</u>-soluble <u>cationic</u> amidine polymers)

Ink-jet recording sheets

(water-resistant recording sheets having agreeus ink-absorbing layers containing water-insol. cationic polymers and water-soluble cationic amidine polymers)

IT 345580-96-3P

ΙT

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(water-resistant recording sheets having aqueous ink-absorbing layers containing water-insol. cationic

polymers and <u>water-soluble cationic</u> amidine polymers)

IT 265327-80-8, PVAD-L

RL: TEM (Technical or engineered material use); USES (Uses) (water-resistant recording sheets having aqueous ink-absorbing layers containing water-insol. cationic polymers and water-soluble cationic amidine polymers)

IT 345580-96-3P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(<u>water</u>-resistant recording sheets having <u>aqueous</u> ink-absorbing layers containing <u>water</u>-insol. <u>cationic</u> polymers and <u>water</u>-soluble <u>cationic</u> amidine polymers)

RN 345580-96-3 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2,2-dimethyl-1,3-propanediyl di-2-propenoate, 1-ethenyl-2-pyrrolidinone, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0 CMF C9 H19 N2 O . Cl

● c1-

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 2223-82-7 CMF C11 H16 O4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 88-12-0 CMF C6 H9 N O

CM 6

CRN 80-62-6 CMF C5 H8 O2

L271 ANSWER 20 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:25733 HCAPLUS Full-text

DOCUMENT NUMBER: 132:65523

TITLE: Cathodic electrodeposition paint composition with good

antislipping properties

INVENTOR(S): Koyama, Toshitaka; Mukai, Takahiro; Nakano, Shinji;

Yamada, Mitsuo

PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000007959	А	20000111	JP 1998-178573	19980625 <
KR 2000006374	А	20000125	KR 1999-23656	19990623 <
US 6136895	A	20001024	US 1999-339834	19990625 <
PRIORITY APPLN. INFO.:			JP 1998-178573 A	. 19980625 <
ED Entered STN: 12 Ja	ın 2000			

The composition comprises a polymer base and a crosslinking agent mixture containing 0.1-20% an acrylic polymer (as antisliding agent) having amino and acid groups and having OH value 50-200. Thus, a composition was made from 627.2 g reaction product, prepared by the reaction of 92 parts TDI and 42 parts bisphenol A-propylene oxide adduct then with 365 parts bisphenol A-epichlorohydrin copolymer and 87 parts bisphenol A in the presence of benzyldimethylamine, diethanolamine, N-methylethanolamine and aminoethylethanolamine ketimine compound in Me iso-Bu ketone (I), 209.1 g a crosslinker, prepared by the reaction of 723 parts IPDI and 610 parts Me Et ketone oxime in I in the presence of dibutyltin laurate, 25.1 parts a copolymer of 4-hydroxybutyl acrylate 250, 2-ethylhexyl methacrylate 70, Bu methacrylate 480, dimethylaminoethyl methacrylate 100 and 2-methoxyethyl acrylate 90 parts, 266.4 parts a pigment dispersion and 1249.2 parts deionized H2O.

IC ICM C09D005-44

ICS C08F008-32; C08G018-58; C08G018-80; C09D007-12

CC 42-10 (Coatings, Inks, and Related Products)

IT 253311-30-7P 253311-31-8P 253311-32-9P <u>253311-33-0P</u>

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(cathodic electrodeposition paint composition with good antislipping properties)

IT 253311-33-0P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(cathodic electrodeposition paint composition with good antislipping properties)

RN 253311-33-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {}^{\rm H2\,C} \\ {}^{\rm Me} - {}^{\rm C} - {}^{\rm C} - {}^{\rm O} - {}^{\rm CH}_2 - {}^{\rm CH}_2 - {}^{\rm OH} \end{array}$$

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 79-41-4 CMF C4 H6 O2

L271 ANSWER 21 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:19164 HCAPLUS Full-text

DOCUMENT NUMBER: 132:65503

TITLE: Coating process for metal plates

INVENTOR(S): Tada, Masahiro; Tanaka, Shoichi; Nakajima, Yoshio

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000000521	A	20000107	JP 1998-167198	19980615 <
PRIORITY APPLN. INFO.:			JP 1998-167198	19980615 <

ED Entered STN: 10 Jan 2000

- AΒ The process comprises forming on a metal plate a colored polyester base coat (Tg 0-70°, elongation at break \geq 100%), and forming on the base coat a clear coat containing epoxy-containing acrylic resins (Mw 10,000-500,000, Mw/Mn \geq 3, Tg -10° to 70° , epoxy equiv 200-2000, prepared from 20-70% styrene, OHsubstituted monomers, epoxy-containing monomers, and optionally other monomers) 30-70, polyesters (Mn 400-5000, Tg -10° to 70° , acid value 50-400 mg KOH/g) 10-50, and melamine resin hardeners 10-40 parts. The coated metal plates show good processability, and good antistaining property. Thus, a primer (KP Color 8630) and a colored polyester (AT 2100 White) were applied on a chromated galvanized steel sheet by die coating, baked at 220° for 70 s, overcoated with a clear coat containing 50:7:15:8:20 styrene-Bu acrylate-4hydroxybutyl acrylate-2-hydroxyethyl methacrylate-glycidyl methacrylate copolymer (Mw 120,000, Tg 37°, epoxy equiv 710 g/equiv, Mw/Mn 6.8) 70, 0.4:0.2:0.2:0.6 (mol) hexahydrophthalic anhydride-isophthalic acidneopentyl glycol -3,3-dimethylolpentane-trimethylolpropane copolymer (Mn 2500, acid value 120 mg KOH/g, Tg 30°) 10, melamine resin (Cymel 303) 20, and crosslinking catalyst (Nacure 5225) 0.1 part, and baked at 235° for 50 s to give a coated sheet having clarity value (PGD) 1.0 and good stain resistance.
- IC ICM B05D007-14

ICS C09D125-04; C09D131-02; C09D161-20; C09D167-00

- CC 42-10 (Coatings, Inks, and Related Products) Section cross-reference(s): 55
- ST clear coating <u>colored</u> polyester base layer; steel sheet <u>colored</u> clear coating; styrene hydroxybutyl acrylate copolymer clear coating; hydroxyethyl methacrylate copolymer coating; glycidyl methacrylate copolymer coating; hexahydrophthalic annhydride neopentyl <u>glycol</u> copolymer; isophthalic acid dimethylolpetane trimethylolpropane copolymer; cracking prevention clear <u>color</u> coating sheet; stain resistance clear coating metal plate; epoxy acrylic resin clear coating; acidic polyester epoxy resin clear coating; melamine resin hardener clear coating
- IT Coating materials

(acid-resistant; coatings containing <u>colored</u> polyester base layer and epoxy-containing acrylic resin clear coat for metal plates)

IT Epoxy resins, uses

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(acrylic; coatings containing <u>colored</u> polyester base layer and epoxy-containing acrylic resin clear coat for metal plates)

IT Coating materials

(alkali-resistant; coatings containing <u>colored</u> polyester base layer and epoxy-containing acrylic resin clear coat for metal plates)

IT Coating materials

(antistaining; coatings containing <u>colored</u> polyester base layer and epoxy-containing acrylic resin clear coat for metal plates)

IT Primers (paints)

(coatings containing <u>colored</u> polyester base layer and epoxy-containing acrylic resin clear coat for metal plates)

IT Polyesters, uses

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(coatings containing <u>colored</u> polyester base layer and epoxy-containing acrylic resin clear coat for metal plates)

IT Coating materials

(<u>colored</u>; coatings containing <u>colored</u> polyester base

layer and epoxy-containing acrylic resin clear coat for metal plates) ΙT Aminoplasts RL: MOA (Modifier or additive use); USES (Uses) (hardeners; coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) ΙT Galvanized steel RL: MSC (Miscellaneous) (sheet; coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) ΙT Coating materials (solvent-resistant; coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) Coating process ΙT (three-coat-two-bake; coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) ΙT Coating materials (transparent; coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) 253433-49-7P, Butyl acrylate-3,3-dimethylolpentane-formaldehyde-ΙT glycidyl methacrylate-hexahydrophthalic anhydride-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-isophthalic acid-melamine-neopentyl glycol-styrene-trimethylolpropane copolymer 253433-50-0P 253433-51-1P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) ΙT 222414-12-2, KP Color 8630 253441-29-1, AT 2100 White RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) ΙT 253433-49-7P, Butyl acrylate-3,3-dimethylolpentane-formaldehydeglycidyl methacrylate-hexahydrophthalic anhydride-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-isophthalic acid-melamine-neopentyl glycol-styrene-trimethylolpropane copolymer 253433-50-0P 253433-51-1P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (coatings containing colored polyester base layer and epoxy-containing acrylic resin clear coat for metal plates) RN 253433-49-7 HCAPLUS CN 1,3-Benzenedicarboxylic acid, polymer with butyl 2-propenoate, 2,2-diethyl-1,3-propanediol, 2,2-dimethyl-1,3-propanediol, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, formaldehyde, hexahydro-1,3-isobenzofurandione, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME) CM 1 CRN 2478-10-6 CMF C7 H12 O3

HO-(CH2)4-O-C-CH-CH2

$$H 2 C \longrightarrow CH - Ph$$

CRN 77-99-6 CMF C6 H14 O3

CM 12

CRN 50-00-0 CMF C H2 O

H 2 C-O

RN 253433-50-0 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with butyl 2-propenoate,

 $2, 2- \texttt{dimethyl-1}, 3- \texttt{propanediol}, \ \texttt{ethenylbenzene}, \ 2- \texttt{ethyl-2-(hydroxymethyl)-1}, 3- \texttt{propanediol},$

1,3-propanediol, formaldehyde, hexahydro-1,3-isobenzofurandione,

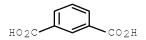
1,6-hexanediol, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl

2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and

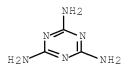
1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

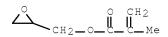


CRN 108-78-1 CMF C3 H6 N6



CM 8

CRN 106-91-2 CMF C7 H10 O3



CM 9

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 10

CRN 85-42-7 CMF C8 H10 O3

CRN 77-99-6 CMF C6 H14 O3

CM 12

CRN 50-00-0 CMF C H2 O

H 2 C==O

RN 253433-51-1 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with butyl 2-propenoate, 2,2-dimethyl-1,3-propanediol, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, formaldehyde, hexahydro-1,3-isobenzofurandione, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2} \overset{\circ}{\longrightarrow} \overset{\circ}{\underset{\text{CH}_2}{\parallel}} \overset{\text{CH}_2}{\underset{\text{C}}{\parallel}}_{\text{Me}}$$

CM 8

CRN 100-42-5 CMF C8 H8

H 2 C === C H -- P h

CM 9

CRN 85-42-7 CMF C8 H10 O3

CM 10

CRN 77-99-6 CMF C6 H14 O3

CRN 50-00-0 CMF C H2 O

H2C=O

L271 ANSWER 22 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:751759 HCAPLUS Full-text

DOCUMENT NUMBER: 132:4115

TITLE: Stain-resistant clear coating compositions for metal

sheets

INVENTOR(S): Tada, Masahiro; Tanaka, Shoichi; Nakai, Noboru

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11323243	A	19991126	JP 1998-138259	19980520 <
PRIORITY APPLN. INFO.:			JP 1998-138259	19980520 <

ED Entered STN: 26 Nov 1999

- The coating composition comprises 30-70 parts OH-containing acrylic polymer (Mn 10,000-500,000 and Tg -10 to 70°) having styrene 15-60%, (B) 10-50 parts polyester having Mn 400-5000, Tg -10 to 70° and acid value 50-400 mgKOH/g, and (C) 10-40 melamine curing agent. Thus, styrene-Bu acrylate-4-hydroxybutyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid copolymer 70 and hexahydrophthalic anhydride-isophthalic acid-neopentyl glycol-3,3-dimethylolpentane-trimethylolpropane copolymer 10, Cymel 303 (melamine resin) 20 and Nacure 5225 0.1 parts were mixed, and applied to a steel plate coated with epoxy primer coating and color base coating, and baked at 235° for 50 s, showing image clarity (PGD value) 1.0, pencil hardness 4B and good stain resistance.
- IC ICM C09D133-14

ICS B05D001-36; B05D005-00; B05D007-14; C09D005-16; C09D125-14; C09D161-28; C09D167-00

- CC 42-10 (Coatings, Inks, and Related Products)
- IT <u>251323-57-6P</u> <u>251323-58-7P</u> <u>251323-59-8P</u> <u>251323-60-1P</u>

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(stain-resistant clear coating compns. for metal sheets)

IT <u>251323-57-6P</u> <u>251323-58-7P</u>

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(stain-resistant clear coating compns. for metal sheets)

RN 251323-57-6 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with butyl 2-propenoate, 2,2-diethyl-1,3-propanediol, 2,2-dimethyl-1,3-propanediol, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, formaldehyde, hexahydro-1,3-isobenzofurandione, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 126-30-7 CMF C5 H12 O2

CRN 121-91-5 CMF C8 H6 O4

CM 6

CRN 115-76-4 CMF C7 H16 O2

CM 7

CRN 108-78-1 CMF C3 H6 N6

CM 8

CRN 100-42-5 CMF C8 H8 $H_2C \longrightarrow CH - Ph$

CM 9

CRN 85-42-7 CMF C8 H10 O3

CM 10

CRN 79-41-4 CMF C4 H6 O2

CM 11

CRN 77-99-6 CMF C6 H14 O3

CM 12

CRN 50-00-0 CMF C H2 O

H 2 C-O

RN 251323-58-7 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with butyl 2-propenoate,

2,2-dimethyl-1,3-propanediol, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-

1,3-propanediol, formaldehyde, hexahydro-1,3-isobenzofurandione,

1,6-hexanediol, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl

2-methyl-2-propenoate, 2-methyl-2-propenoic acid and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6

CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 629-11-8 CMF C6 H14 O2

HO- (CH2)6-OH

CM 4

CRN 141-32-2 CMF C7 H12 O2

CRN 126-30-7 CMF C5 H12 O2

CM 6

CRN 121-91-5 CMF C8 H6 O4

CM 7

CRN 108-78-1 CMF C3 H6 N6

CM 8

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CRN 79-41-4 CMF C4 H6 O2

CM 11

CRN 77-99-6 CMF C6 H14 O3

CM 12

CRN 50-00-0 CMF C H2 O

H 2 C-O

L271 ANSWER 23 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:597513 HCAPLUS Full-text

DOCUMENT NUMBER: 131:230088

TITLE: Manufacture of water-thinned acrylic binders

for coatings

INVENTOR(S): Wilfinger, Werner; Kriessmann, Ingo; Gossak, Kurt;

Luttenberger, Johann

PATENT ASSIGNEE(S): Vianova Resins AG, Austria; Surface Specialties

Austria GmbH

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.			KIND DATE			APPLICATION NO.				DATE							
	9420				A1	_	1999		EP	199	99-1	0415	8			 19990	302	<
EP	9420				В1		2004	00-0										
	R:	ΑT,	BE,	CH,	DE,	DK.	, ES,	FR,	GB, G	R,]	IT,	LI,	LU,	NL,	SE	, MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	, RO											
AT	9800	429			А		2000	0615	AT	199	98-4	29				19980	311	<
AT	4072	54			В		2001	0226										
AT	2779	80			T		2004	1015	AT	199	99-1	0415	8			19990	302	<
US	6228	931			В1		2001	0508	US	199	99-2	6488	3			19990	309	<
JP	1132	3157			A		1999	1126	JP	199	99-6	3959)			19990	310	<
PRIORIT	Y APP	LN.	INFO	.:					AT	199	98-4	29			A	19980	311	<
									EP	199	99-1	0415	8		A	19990	302	<

- ED Entered STN: 22 Sep 1999
- The title binders, useful for 1- or 2-component coatings, adhesives, sizes and AΒ impregnating materials, contain a $\underline{\text{M2O}}\text{-insol.}$ synthetic resin (A), e.g., a polyacrylate, polyester, alkyd, epoxy or melamine resin or a polyurethane, and, as an emulsifier, a carboxy- and OH-functional polymer (B) which is a neutralized reaction product of a H2O-insol. OH-functional synthetic polymer (B1), and a carboxy-functional polymer (B2). For example, a mixture of 120 parts (solids) acrylic acid-ethylhexyl acrylate-Me methacrylate-styrene copolymer and 180 parts (solids) Bu acrylate-2-hydroxyethyl methacrylateglycidyl methacrylate-isobornyl methacrylate copolymer (preparation of copolymers by radical polymerization in Me2CHOH solution given) was concentrated to a solid content of 91% and kept at 105° in an autoclave to give an emulsifier resin (B) which could produce a homogeneous aqueous emulsion when mixed (3 g) with 7 g H2O. The resin having acid number 124 mg/g and acid number 26 mg/g was neutralized (80%) with Me2NCH2CH2OH, cooled to 100°, 1000 parts 70% solution of Macrynal SM 516 (polymer A) in BuOAc was added and the mixture emulsified in H2O to give a title binder.
- IC ICM C09D005-02

ICS C08G081-02; C08J003-03; C09D007-12; C09D201-00

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 37

- ST <u>water</u> thinned acrylic manuf binder coating; emulsifier resin manuf waterborne acrylic coating; hydroxy acrylic polymer emulsification emulsifier resin polyacrylate manuf
- IT Emulsifying agents

(manufacture of <u>polyacrylates</u> as emulsifiers for acrylic binders for <u>water</u>-thinned coatings, adhesives, sizes and impregnating materials)

IT Adhesives

Coating materials

Impregnating materials

Sizes (agents)

(water-thinned; manufacture of polyacrylates as emulsifiers for acrylic binders for water-thinned coatings, adhesives, sizes and impregnating materials)

IT 88895-77-6, Synthacryl SC 370 135152-39-5, Macrynal SM 516 170137-49-2, Macrynal VSM 1565 244021-58-7, Macrynal VSM 2800 RL: TEM (Technical or engineered material use); USES (Uses) (binder, aqueous dispersion; manufacture of polyacrylates as emulsifiers for acrylic binders for water-thinned coatings, adhesives, sizes and impregnating materials)

ΙT 88677-27-4P, Acrylic acid-Butyl acrylate-2-Ethylhexyl acrylate-2-Hydroxyethyl acrylate-Methyl methacrylate-Styrene copolymer 243979-48-8P, Acrylic acid-Butyl acrylate-2-Ethylhexyl acrylate-Glycidyl methacrylate-2-Hydroxyethyl methacrylate-Isobornyl methacrylate-Methyl methacrylate-Styrene copolymer 243979-49-9P, Butyl acrylate-2-Hydroxyethyl methacrylate-Methacrylic acid-Methyl methacrylate-Styrene-Tripropylene glycol monomethacrylate copolymer 243979-50-2P, Acrylic acid-Butyl acrylate-4-Hydroxybutyl acrylate-2-Hydroxyethyl methacrylate-Isobornyl methacrylate-Methyl methacrylate-Styrene copolymer 243979-51-3P, Acrylic acid-2-Ethylhexyl acrylate-4-Hydroxybutyl acrylate-2-Hydroxyethyl methacrylate-Isobornyl methacrylate-Methyl methacrylate-Styrene copolymer RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(emulsifier; manufacture of polyacrylates as emulsifiers for acrylic binders for water-thinned coatings, adhesives, sizes and impregnating materials)

IT 243979-50-2P, Acrylic acid-Butyl acrylate-4-Hydroxybutyl acrylate-2-Hydroxyethyl methacrylate-Isobornyl methacrylate-Methyl methacrylate-Styrene copolymer 243979-51-3P, Acrylic acid-2-Ethylhexyl acrylate-4-Hydroxybutyl acrylate-2-Hydroxyethyl methacrylate-Isobornyl methacrylate-Methyl methacrylate-Styrene copolymer RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(emulsifier; manufacture of <u>polyacrylates</u> as emulsifiers for acrylic binders for <u>water</u>-thinned coatings, adhesives, sizes and impregnating materials)

RN 243979-50-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-propenoic acid and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3 CMF C14 H22 O2

Relative stereochemistry.

CM 2

CRN 2478-10-6

CMF C7 H12 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 100-42-5 CMF C8 H8

CM 6

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

RN 243979-51-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-propenoic acid and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3 CMF C14 H22 O2

Relative stereochemistry.

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

CRN 103-11-7 CMF C11 H20 O2

CRN 100-42-5 CMF C8 H8

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L271 ANSWER 24 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:693778 HCAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 125:303434

TITLE: Room temperature air-curable compositions containing

acrylic polyurethane oligomers and (meth)acrylate

esters

INVENTOR(S): Iwasaki, Kazuhiko

PATENT ASSIGNEE(S): Mitsubishi Rayon Co, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08231922	A	19960910	JP 1995-34131	19950222 <
PRIORITY APPLN. INFO.:			JP 1995-34131	19950222 <

ED Entered STN: 23 Nov 1996

- Coating compns. useful on floors, walls, etc. comprise 15-70% oligomers from polyisocyanates, OH-substituted (meth)acrylate esters, and allyl ether monoalcs., 15-85% (meth)acrylate esters, 0-25% (meth)acrylate-soluble acrylic polymers, 0.1-15% crosslinking agents, 0.1-10% crosslinking accelerators, and 0.01-5% crosslinking aids. Thus, Duranate TPA 100 (HMDI trimer) 543.0, Me methacrylate (I) 306.2, 4-hydroxybutyl acrylate 144, and Neoallyl P 30 (pentaerythritol triallyl ether) 537.6 parts were allowed to react, mixed (25 parts) with I 70, I-Bu acrylate copolymer 5, N,N-di(2-hydroxypropyl)-p-toluidine 0.5, 8% Co naphthenate 0.5, 50% Bz202 2, and an anti-foaming agent 0.5 part, mixed (100 parts solution) with 133 parts silicious sand and 5 parts green pigment, applied on a primed slate plate to show set-to-touch time 60 s at 25° and good surface smoothness.
- IC ICM C09D175-16 ICS C09D004-02
- CC 42-10 (Coatings, Inks, and Related Products)
- IT 183277-82-9P, Hexamethylene diisocyanate trimer-4-hydroxybutyl acrylate-methyl methacrylate-pentaerythritol triallyl ether copolymer 183277-83-0P $\underline{183277-84-1P}$ $\underline{183277-85-2P}$

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (room temperature air-curable acrylic polyurethane coatings containing crosslinking catalysts, accelerators, and aids)

IT 183277-84-1P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (room temperature air-curable acrylic polyurethane coatings containing crosslinking catalysts, accelerators, and aids)

RN 183277-84-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 4-hydroxybutyl 2-propenoate, methyl 2-methyl-2-propenoate, 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 3779-63-3

CMF C24 H36 N6 O6

OCN_ (CH₂)6
$$\sim$$
 (CH₂)6—NCO OCN_ (CH₂)6

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 1471-17-6 CMF C14 H24 O4

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 80-62-6 CMF C5 H8 O2



L271 ANSWER 25 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN 1996:715470 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 125:331688

TITLE: Thermosetting acrylic coating compositions with good

storage stability and low-temperature curability

INVENTOR(S): Iwamoto, Akio; Kato, Takeshi; Fuje, Shinobu; Hotsuta,

Kazuhiko; Iwase, Kunio; Takeuchi, Hiroshi

Mitsubishi Rayon Co, Japan PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 16 SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08225768	A	19960903	JP 1995-116176	19950217 <
JP 3457767	B2	20031020		
JP 07278486	A	19951024	JP 1995-29896	19950217 <
JP 3524613	B2	20040510		
PRIORITY APPLN. INFO.:			JP 1995-29896 A	.3 19950217 <
			JP 1994-21642 A	. 19940218 <

Entered STN: 05 Dec 1996 ED

The compns., useful for clear topcoats especially for automobiles requiring AΒ excellent appearance and high hiding power, contain (A) acrylic polymers containing 0.5-40% dicarboxylic acid anhydride monomer units having 50-98% half-esterified acid anhydrides, (B) epoxy-containing acrylic polymers, and optionally (C) OH-containing acrylic polymers. Thus, 100 parts mono-Bu fumarate-Bu methacrylate-2-ethylhexyl acrylate-methacrylic acid-styrene (5:49.5:20:15:10) copolymer [acid value 114 mg-KOH/g, weight-average mol. weight (Mw) 10,000] and 80 parts Bu methacrylate-2-ethylhexyl methacrylateglycidyl methacrylate-2-hydroxyethyl acrylate-styrene (10:23:30:7:30) copolymer (OH equivalent 1657 g/equivalent, epoxy equivalent 473 g/equivalent, Mw 5,000) were blended with 0.2 part surface modifier and 1.8 parts benzyltributylammonium chloride, diluted with 50:50 Solvesso 100/Cellosolve acetate to viscosity (in a number 4 Ford cup at 20°) of 25 s, and coated on a stainless-steel plate for automobile bodies and baked to give a film with beautiful appearance and excellent resistances to acid, water, weather, crack and abrasion.

IC ICM C09D133-14

ICS C08G059-34; C08L063-00; C09D163-00

42-7 (Coatings, Inks, and Related Products) CC

Coating materials IT

(acid- and water-resistant, thermosetting, transparent; thermosetting acrylic coatings with good storage stability and low-temperature curability)

183425-75-4P, Monobutyl fumarate-butyl methacrylate-2-ethylhexyl acrylate-2-ethylhexyl methacrylate-qlycidyl methacrylate-2-hydroxyethyl acrylate-maleic anhydride-methacrylic acid-styrene copolymer 183425-79-8P 183425-86-7P 183425-93-6P 183425-98-1P

183426-02-0P 183426-06-4P <u>183426-11-1P</u> 183426-15-5P 183601-58-3P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermosetting acrylic coatings with good storage stability and low-temperature curability)

IT 183425-79-8P 183425-86-7P 183426-11-1P 183601-58-3P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermosetting acrylic coatings with good storage stability and low-temperature curability)

RN 183425-79-8 HCAPLUS

CN 2-Butenedioic acid (2Z)-, monomethyl ester, polymer with cyclohexyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl hydrogen butanedioate, methyl 2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 82428-30-6 CMF C11 H16 O3

CM 2

CRN 20882-04-6 CMF C10 H14 O6

CM 3

CRN 3052-50-4 CMF C5 H6 O4

Double bond geometry as shown.

$$HO_2C$$

CMF C10 H16 O2

CM S

CRN 100-42-5 CMF C8 H8

 $H 2 C \longrightarrow C H \longrightarrow P h$

CM 10

CRN 79-41-4 CMF C4 H6 O2

$$Me - C - CO_2H$$

RN 183425-86-7 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate, ethenylbenzene, 2,5-furandione, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl hydrogen butanedioate, 2-methyl-2-propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 82428-30-6 CMF C11 H16 O3

CRN 51252-88-1 CMF C14 H20 O6

CM 3

CRN 20882-04-6 CMF C10 H14 O6

CM 4

CRN 2478-10-6 CMF C7 H12 O3

CM 5

CRN 868-77-9 CMF C6 H10 O3

CM 6



$$H 2 C \longrightarrow CH - Ph$$

CRN 97-88-1 CMF C8 H14 O2

CM 12

CRN 79-41-4 CMF C4 H6 O2

RN 183426-11-1 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1-butyl ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, dodecyl 2-methyl-2-propenoate, ethenylbenzene, 2,5-furandione, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and tridecyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 82428-30-6 CMF C11 H16 O3

CM 2

CRN 2495-25-2 CMF C17 H32 O2

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 925-21-3 CMF C8 H12 O4

Double bond geometry as shown.

CM 5

CRN 818-61-1 CMF C5 H8 O3

CM 6

CRN 142-90-5 CMF C16 H30 O2

CRN 141-32-2 CMF C7 H12 O2

CM 8

CRN 108-31-6 CMF C4 H2 O3

CM 9

CRN 100-42-5 CMF C8 H8

$$H_2C \longrightarrow CH - Ph$$

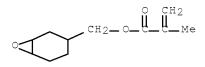
CM 10

CRN 97-88-1 CMF C8 H14 O2

RN 183601-58-3 HCAPLUS

CN Butanedioic acid, methylene-, mono(2-ethylhexyl) ester, polymer with dodecyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, 2,5-furandione, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-propenoate, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl hydrogen butanedioate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CRN 82428-30-6 CMF C11 H16 O3



CM 2

CRN 20882-04-6 CMF C10 H14 O6

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 818-61-1 CMF C5 H8 O3

CM 5

CRN 142-90-5 CMF C16 H30 O2

CRN 42296-64-0 CMF C13 H22 O4

CCI IDS

CM 11

CRN 104-76-7 CMF C8 H18 O

CH2-OH L Et-CH-Bu-n

CM 12

CRN 97-65-4 CMF C5 H6 O4

CH2 HO2C—CH2—CO2H

L271 ANSWER 26 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:315296 HCAPLUS Full-text

DOCUMENT NUMBER: 124:346170

TITLE: Copolymers of (poly)cyclic monomers having special

isomer distributions for use in coatings

INVENTOR(S): Epple, Ulrich; Schmidt, Holger; Brindoepke, Gerhard;

Doessel, Karl-Friedrich

PATENT ASSIGNEE(S): Hoechst A.-G., Germany SOURCE: Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 705853 EP 705853	A2 19960410 A3 19960703		19951002 <
EP 705853	B1 19990203		DT CE
R: AT, BE, CH DE 4435950		GB, GR, IE, IT, LI, NL,	PI, SE
	A1 19960411		19941007 <
AT 176487 US 5612434	T 19960411 T 19990215 A 19970318	AT 1995-115526	19941007 < 19951002 < 19951003 <

CN 112876	58 <i>I</i>	P.	19960814	CN	1995-117260		19951005	<
CA 216008	35 <i>I</i>	1 1	19960408	CA	1995-2160085		19951006	<
JP 081886	526 I	A	19960723	JΡ	1995-260487		19951006	<
ZA 950843	55 <i>I</i>	P	19970407	ZA	1995-8435		19951006	<
BR 950433	32 I	P.	19961008	BR	1995-4332		19951009	<
PRIORITY APPL	I. INFO.:			DE	1994-4435950	Α	19941007	<
ED Entered S	TN: 30 May 1	1996						

AB The title polymers, with low free volume and glass temps. ≤15° higher at equivalent mol. wts. and mol. weight distributions, are prepared from unsatd. monomers containing esters of unsatd. acids with isoborneol ≤92, isofenchyl alc. ≥3.5, and pseudoborneol ≥1%. Peroxide-initiated polymerization of Cardura E10 24.18, acrylic acid 3.54, methacrylic acid 7.69, hydroxyethyl methacrylate 19.85, isobornyl methacrylate 14.89, MMA 7.18, and styrene 22.67 parts at 170° gave a copolymer (I) with OH number 135.1, acid number 23.0, viscosity (23°) 3.32 Pa-s, weight-average mol. weight 3860, polydispersity 2.1, Hazen color 45, and glass temperature 29°. A high-solids (70.0%) coating composition formulated with I and a polyisocyanate (Desmodur N 3390) and baked at 130° for 20 min gave a film with Koenig pendulum hardness 207 s and Erichsen indentation 4.4 mm.

IC ICM C08F220-18

ICS C09D133-06; C09J133-06

CC 42-7 (Coatings, Inks, and Related Products)

IT Coating materials

(water-thinned, copolymers of (poly)cyclic monomers having special isomer distributions for use in coatings)

IT 172904-03-9 172904-04-0 176795-81-6 <u>176795-82-7</u> 176795-83-8

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(copolymers of (poly)cyclic monomers having special isomer distributions for use in coatings)

IT 176795-82-7

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

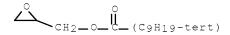
(copolymers of (poly)cyclic monomers having special isomer distributions for use in coatings)

RN 176795-82-7 HCAPLUS

CN 2-Butenedioic acid (2Z)-, diethyl ester, polymer with ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl tert-decanoate, 2-propenoic acid and rel-(1R, 2R, 4R)-1, 7, 7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 71206-09-2 CMF C13 H24 O3 CCI IDS



Relative stereochemistry.

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {}^{\rm H2C} \\ {}^{\rm C} \\ {}^{\rm Me} - {}^{\rm C} - {}^{\rm C} - {}^{\rm C} - {}^{\rm CH}_2 - {}^{\rm CH}_2 - {}^{\rm CH}_2 - {}^{\rm CH}_2 \end{array}$$

CM 5

CRN 141-05-9 CMF C8 H12 O4

Double bond geometry as shown.

CM 6

CRN 100-42-5 CMF C8 H8

H 2 C === CH == Ph

7 CM

CRN 80-62-6 CMF C5 H8 O2

CM 8

CRN 79-10-7 CMF C3 H4 O2

L271 ANSWER 27 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:931254 HCAPLUS Full-text

DOCUMENT NUMBER: 123:314876

TITLE: Process for preparing $\underline{\text{water}}$ -dilutable, acrylate copolymer-based lacquer binders

INVENTOR(S): Wilfinger, Werner; Kriessmann, Ingo; Gossak, Kurt PATENT ASSIGNEE(S): Vianova Kunstharz Aktiengesellschaft, Austria

SOURCE:

PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.	ATENT NO.	KIND DATE	APPLICATION NO.	DATE		
_						
M	9517450	A1 19950629	WO 1994-AT203	19941222 <		
	W: AU, BR, CA,	CN, CZ, HU, JP,	KR, PL, RO, RU, SI, SK,	US		
	RW: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IE, IT, LU, MC,	NL, PT, SE		
A	Г 9401376	A 19970215	AT 1994-1376	19940713 <		
A'	Г 402933	В 19970925				
C.	A 2177594	A1 19950629	CA 1994-2177594	19941222 <		
C	A 2177594	C 20050201				

```
AU 9512672
                    A
                            19950710
                                      AU 1995-12672
                                                           19941222 <--
    AU 684876
                     В2
                            19980108
    EP 736058
                     A1
                            19961009
                                     EP 1995-903702
                                                           19941222 <--
    EP 736058
                      В1
                            19990602
       R: AT, BE, DE, ES, FR, GB, GR, IT, NL, PT, SE
    CN 1138340 A
                           19961218
                                      CN 1994-194585
                                                           19941222 <--
                      Α
                                     BR 1994-8401
    BR 9408401
                            19970805
                                                           19941222 <--
    JP 09511263
                      Τ
                            19971111 JP 1994-517050
                                                           19941222 <--
    CZ 284372
                     В6
                            19981111 CZ 1996-1854
                                                           19941222 <--
    AT 180808
                      Τ
                            19990615
                                     AT 1995-903702
                                                           19941222 <--
    ES 2132603
                     Т3
                            19990816
                                     ES 1995-903702
                                                           19941222 <--
    US 5811484
                            19980922
                                     US 1996-663127
                                                           19960624 <--
                      Α
PRIORITY APPLN. INFO.:
                                      AT 1993-2606
AT 1994-1376
                                                        A 19931223 <--
                                                       A 19940713 <--
                                      WO 1994-AT203
                                                       W 19941222 <--
```

ED Entered STN: 21 Nov 1995

AB Water-dilutable acrylate copolymer-based lacquer binders are prepared by reacting 15-40 weight% of an acrylate copolymer containing carboxylic components, with an acid number of 70-240 (preferably 100-200) mg KOH/g, with 60-85 weight% of an acrylate copolymer as a polyhydroxyl component, with hydroxyl number of 90-250 (preferably 110-180) mg KOH/g and an epoxy equivalent of 0.7-26.0 mequiv/100 g solids. The polycarboxyl component is prepared from: (1) 67-90 weight% of a C1-12-alkyl (meth)acrylate, optionally containing up to 50 weight% styrene, and (2) 10-33 weight% of an α,β ethylenically unsatd. carboxylic acid, preferably (meth)acrylic acid; the polyhydroxyl component is prepared from: (1) 40-79.9 weight% C1-12-alkyl (meth)acrylate, optionally containing up to 50 weight% styrene, (2) 20-59.9 weight% of a (meth)acrylic acid monoester with a diol (with a C2-4-alkylene or C6-12-oxyalkylene group), and (3) 0.1-3 weight% of a vinyl epoxide [e.g., glycidyl (meth)acrylate or glycidyl ally ether]. The carboxylic acid groups of the polycarboxyl component are partially neutralized prior to reaction. These lacquer binders are suitable for producing water -dilutable baking enamels with a low auxiliary organic solvent content.

IC ICM C08G081-02

ICS C09D133-06; B05D007-26

- ICI C09D133-06, C09D133-14; C09D133-06, C09D161-20
- CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 42
- ST water dild epoxy polyacrylate lacquer; polymethacrylate epoxy lacquer binder
- IT Epoxy resins, preparation

RL: IMF (Industrial manufacture); POF (Polymer in formulation); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (acrylic, preparation of water-dilutable acrylate-epoxy copolymer-based lacquer binders)

IT Acrylic polymers, preparation

RL: IMF (Industrial manufacture); POF (Polymer in formulation); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (epoxy, preparation of water-dilutable acrylate-epoxy copolymer-based lacquer binders)

IT Coating materials

RL: IMF (Industrial manufacture); POF (Polymer in formulation); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (lacquers, water-thinned, preparation of water-dilutable acrylate-epoxy copolymer-based lacquer binders)

IT 108-01-0 121-44-8, uses

RL: NUU (Other use, unclassified); USES (Uses)
 (neutralization agent; preparation of water-dilutable acrylate-epoxy copolymer-based lacquer binders)

IT 81809-60-1P 105270-80-2P 170572-39-1DP, acrylate polymers

170572-40-4DP, acrylate polymers $\underline{170572-41-5DP}$, acrylate polymers $\underline{170572-42-6P}$ $\underline{170572-43-7P}$

RL: IMF (Industrial manufacture); POF (Polymer in formulation); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation of water-dilutable acrylate-epoxy copolymer-based lacquer binders)

IT $\frac{170572-39-1DP}{170572-43-7P}$, acrylate polymers $\frac{170572-41-5DP}{170572-43-7P}$, acrylate

RL: IMF (Industrial manufacture); POF (Polymer in formulation); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation of water-dilutable acrylate-epoxy copolymer-based lacquer binders)

RN 170572-39-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-propenoate, 2-methylpropyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and [(2-propenyloxy)methyl]oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

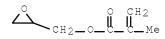
CM 2

CRN 818-61-1 CMF C5 H8 O3

CM 3

CRN 106-92-3 CMF C6 H10 O2

CRN 106-91-2 CMF C7 H10 O3



CM 5

CRN 97-86-9 CMF C8 H14 O2

CM 6

CRN 80-62-6 CMF C5 H8 O2

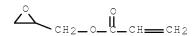
RN 170572-41-5 HCAPLUS

CN 2-Propeneperoxoic acid, 2-methyl-, methyl ester, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-methylpropyl 2-methyl-2-propenoate and oxiranylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 14180-19-9 CMF C5 H8 O3

CM 2



CRN 97-86-9 CMF C8 H14 O2

RN 170572-43-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethyl 2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

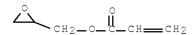
CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 140-88-5 CMF C5 H8 O2

CRN 106-90-1 CMF C6 H8 O3



CRN 97-88-1 CMF C8 H14 O2

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

DOCUMENT NUMBER:

L271 ANSWER 28 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:996257 HCAPLUS <u>Full-text</u>

124:59317

TITLE:

Modular systems for use in aqueous coating

compositions

INVENTOR(S): Heuwinkel, Heike; Lenhard, Werner; Patzschke,

Hans-Peter; Vogt-Birnbrich, Bettina

PATENT ASSIGNEE(S): Herberts GmbH, Germany SOURCE: Ger. Offen., 17 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT NO.			KIND)	DATE		A	PPL:	ICAT	ION	NO.			DATE		
DE	4415292	:		A1	-	 1995	1102	– D	E 19	 994-	 4415	292			 199404	30	<
CA	2166290)		A1		1995	1109	С	A 19	995-	2166	290			199504	26	<
WO	9529960)		A1		1995	1109	W	0 19	995-	EP15	67			199504	26	<
	W: AU	J, CA,	JP,	US													
	RW: AI	, BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL	, PT,	SE	
AU	9524079)		A		1995	1129	А	U 19	995-	2407	9			199504	26	<
AU	692545			В2		1998	0611										
EP	706543			A1		1996	0417	E	P 19	995-	9179	59			199504	26	<
EP	706543			В1		1997	1105										
	R: AI	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	NL,	PT,	SE			
JP	0950433	5		T		1997	0428	J	P 19	995-	5279	81			199504	26	<
AT	159975			T		1997	1115	А	T 19	995-	9179	59			199504	26	<
ES	2110846)		Т3		1998	0216	E	S 19	995-	9179	59			199504	26	<
PRIORITY	Y APPLN.	INFO	.:					D	E 19	994-	4415	292		A	199404	30	<
								W	0 19	995-	EP15	67		W	199504	26	<

- ED Entered STN: 22 Dec 1995
- The title systems, which can be mixed in different ratios to give different coatings (e.g., primers, topcoats, clear coats), comprise <u>cationically</u> stabilized, <u>H2O</u>-thinnable binders, <u>aqueous</u> pastes of <u>pigments</u> and/or fillers containing <u>cationically</u> stabilized resins, <u>aqueous</u> effect <u>pigments</u> containing such resins, and crosslinking and rheol.-controlling agents. A 79.6% solution (viscosity at 50% solids and 25° 12.5 Pa-s) of copolymer from hydroxyethyl methacrylate 195.5, hydroxybutyl acrylate 599, Bu methacrylate 1031, 2-ethylhexyl methacrylate 483, Me methacrylate 439, styrene 893, and N-[3-(dimethylamino)propyl]methacrylamide 358 g was mixed (250 g) with 8 g 50% HCO2H and 713.4 g H2O to give a 20.4% solution with acid content 21 mequiv./100 g solids and pH 6.5. The formulation of such dispersions in coating compns. is decribed.
- IC ICM C09D005-02
 - ICS C09D005-28; C09D005-36; C09D017-00; C09D133-00; C09D175-04; C09D151-08; C09D007-02; B05D007-16
- ICA C09D007-12; C09D005-38; C09D163-00; C08G018-62; C08G018-42; C08J007-04
- ICI C09D133-00, C09D175-04, C09D161-28
- CC 42-7 (Coatings, Inks, and Related Products)
- ST binder coating water thinned; methacrylate copolymer binder coating; hydroxyethyl methacrylate copolymer binder; dimethylaminopropylmethacrylamide copolymer binder; hydroxybutyl methacrylate copolymer binder; acrylate copolymer binder coating; styrene copolymer binder coating
- IT Urethane polymers, uses
 - RL: TEM (Technical or engineered material use); USES (Uses) (polyester-, modular systems for use in aqueous coating compns.)
- IT Coating materials
 - (water-thinned, modular binder systems for use in aq . coating compns.)
- IT 172464-91-4 172464-92-5 172464-93-6 172464-94-7 172464-95-8 172464-96-9 172464-97-0

RL: TEM (Technical or engineered material use); USES (Uses) (modular systems for use in aqueous coating compns.)

IT 172464-91-4 172464-92-5

RL: TEM (Technical or engineered material use); USES (Uses) (modular systems for use in aqueous coating compns.)

RN 172464-91-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 3-(dimethylamino)propyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 20602-77-1 CMF C9 H17 N O2

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 688-84-6 CMF C12 H22 O2

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 6

CRN 97-88-1 CMF C8 H14 O2

CM 7

CRN 80-62-6 CMF C5 H8 O2

RN 172464-92-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2} \overset{\circ}{\longrightarrow} \overset{\circ}{\text{CH}_2} \overset{\text{CH}_2}{\longleftarrow}_{\text{C}} \overset{\text{CH}_2}{\longrightarrow}$$

CM 4

CRN 103-11-7 CMF C11 H20 O2

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CRN 97-88-1 CMF C8 H14 O2

CM 7

CRN 80-62-6 CMF C5 H8 O2

L271 ANSWER 29 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:10435 HCAPLUS Full-text

DOCUMENT NUMBER: 120:10435

TITLE: Acrylate copolymers containing amino, carboxyl and,

optionally, hydroxy groups

INVENTOR(S): Hoffmann, Peter; Bruennemann, Michael PATENT ASSIGNEE(S): BASF Lacke und Farben A.-G., Germany

SOURCE: Ger. Offen., 13 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	ATENT NO.			KIND DATE			LICATION NO	DATE		
DE	4133420		 A1	. 1993	30415	DE	1991-413342	0	19911009	<
WC	9307190		A1	. 1993	30415	WO	1992-EP2259		19920930	<
	W: BR,	CA, J	P, US							
	RW: AT,	BE, C	H, DE,	DK, ES,	FR, G	GB, GR	, IE, IT, L	U, MC,	NL, SE	
EF	607364		A1	. 1994	10727	EP	1993-906359		19920930	<
EF	607364		В1	. 1996	0522					
	R: AT,	BE, C	H, DE,	DK, ES,	FR, G	GB, IT	, LI, NL, S	E		
JF	07500362	2	T	1995	50112	JP	1992-506599		19920930	<
BF	9206603		А	1995	51017	BR	1992-6603		19920930	<
AT	138396		T	1996	0615	AT	1993-906359		19920930	<
ES	2090984		Т3	1996	51016	ES	1993-906359		19920930	<
US	5483004		А	1996	50109	US	1994-211407		19940330	<
PRIORIT	Y APPLN.	INFO.:				DE	1991-413342	0 2	A 19911009	<
						WO	1992-EP2259	Ţ	W 19920930	<
			- 10							

ED Entered STN: 08 Jan 1994

AΒ The title copolymers, showing good yellowing resistance and low-temperature curability and useful for coatings, are prepared by polymerization of vinylimidazole and/or [(dimethylamino)propyl]methacrylamide 1-20, unsatd. alcs. or polyols 0-50, unsatd. carboxylic acids 0-50, and comonomers 30-85% in organic solvents at 80-150° and, optionally, treatment with an anhydride to give the desired acid number Azobisisovaleronitrile-initiated polymerization of hydroxyethyl methacrylate 24, 4-hydroxybutyl acrylate 15, cyclohexyl methacrylate 10, vinylimidazole 10, 1,6-hexanediol dimethacrylate 16, and 2ethylhexyl acrylate 10 parts in 1:1 BuOAc-xylene at 110° in the presence of 0.5 part HSCH2CH2OH and reaction with hexahydrophthalic anhydride gave a solution (49.5% solids) of a copolymer (acid number 75.5) showing viscosity 35.0 dPa-s, and Gardner color 2. A coating prepared from the solution had dust-free time 30 min, tack-free time 210 min, pendulum hardness (80°, 20 min) 79 s, and good adhesion before and after accelerated weathering. IC ICM C08F246-00

ICS C08F226-06; C08F220-60; C08F220-28; C08F220-04; C08F222-02; C08F002-06; C08F004-04; C08F008-46; C09D133-14

ICA C08F283-12; C08G077-20

C08F246-00, C08F220-10, C08F220-20, C08F212-00; C09D133-14, C09D163-00 ICI

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

85-42-7D, Hexahydrophthalic anhydride, reaction products with amine ΙT group-containing acrylic polymers 151753-04-7D, reaction products with hexahydrophthalic anhydride 151753-05-8D, reaction products with hexahydrophthalic anhydride

RL: TEM (Technical or engineered material use); USES (Uses) (coatings, weather-resistant)

151753-04-70, reaction products with hexahydrophthalic anhydride ΙT 151753-05-80, reaction products with hexahydrophthalic anhydride RL: TEM (Technical or engineered material use); USES (Uses) (coatings, weather-resistant)

151753-04-7 HCAPLUS RN

2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester, polymer with cyclohexyl CN 2-methyl-2-propenoate, 2-ethenyl-1H-imidazole, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 43129-93-7 CMF C5 H6 N2

$$\sim$$
 CH \sim CH₂

2 CM

CRN 6606-59-3 CMF C14 H22 O4

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 103-11-7 CMF C11 H20 O2

CM 6

CRN 101-43-9 CMF C10 H16 O2

$$\underbrace{ \text{OLC}_{\text{C}}^{\text{CH}2} \text{IL}_{\text{C}}^{\text{Me}} }$$

RN 151753-05-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester, polymer with cyclohexyl 2-methyl-2-propenoate, N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, 2-ethylhexyl 2-propenoate, 4-hydroxybutyl 2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 6606-59-3 CMF C14 H22 O4

CM 2

CRN 5205-93-6 CMF C9 H18 N2 O

CM 3

CRN 2478-10-6 CMF C7 H12 O3

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$\begin{array}{c} {\rm H2C} \\ {\rm Me} \\ {\rm C} \\ {\rm C} \\ {\rm CO} \\ {\rm CH2} \\ {\rm CH2} \\ {\rm CH2} \\ {\rm OH} \end{array}$$

CM 5

CRN 103-11-7 CMF C11 H20 O2

CM 6

CRN 101-43-9 CMF C10 H16 O2

L271 ANSWER 30 OF 84 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:64378 HCAPLUS Full-text

DOCUMENT NUMBER: 114:64378

TITLE: Coating compositions containing hydroxylated polymers,

aminoplasts, and hydroxy acid catalysts

INVENTOR(S): Gross, Lutz Werner; Wieditz, Stefan; Jung, Werner

Alfons

PATENT ASSIGNEE(S): BASF Lacke und Farben A.-G., Germany

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
DE 3905915	A1 1990	0906 DE 1989-3905915	19890225 <
CA 2046866	A1 1990	0826 CA 1990-2046866	19900208 <
CA 2046866	C 1998	0623	
EP 385527	A1 1990	0905 EP 1990-200344	19900208 <
EP 385527	B1 1993	1020	
R: GR			
WO 9010039	A1 1990	0907 WO 1990-EP201	19900208 <
W: BR, CA, JE	, US		
RW: AT, BE, CH	DE, DK, ES,	FR, GB, IT, LU, NL, SE	
BR 9007169		1112 BR 1990-7169	19900208 <

```
EP 461120
                         Α1
                                19911218
                                            EP 1990-902251
                                                                   19900208 <--
         R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE
     JP 04500379
                         Τ
                                19920123
                                           JP 1990-502605
                                                                   19900208 <--
    JP 07057855
                          В
                                19950621
     AT 96157
                          Τ
                                19931115
                                            AT 1990-200344
                                                                   19900208 <--
     ES 2060924
                         Т3
                                19941201
                                            ES 1990-200344
                                                                   19900208 <--
     US 5212242
                         Α
                                19930518
                                            US 1991-752651
                                                                   19911029 <--
                                                               A 19890225 <--
PRIORITY APPLN. INFO.:
                                            DE 1989-3905915
                                            EP 1990-200344
                                                               A 19900208 <--
                                            WO 1990-EP201
                                                               A 19900208 <--
OTHER SOURCE(S):
                        MARPAT 114:64378
     Entered STN: 23 Feb 1991
ΕD
     The title coating compns., with long pot life but curing rapidly at low
AΒ
     temps., contain 50-90:50-10 mixts. of OH group-containing vinyl polymers and
     melamine resins, and the acids R1OCOCH2CH(SO3X)CO2R2 [R1 = (alkoxy)alkyl
     bearing 1-3 OH groups, R2 = (alkoxy)alkyl optionally bearing \leq 3 OH groups, X =
     H, protonated amine] as catalysts. A pigmented acrylic polymer (from Me
     methacrylate 210, hydroxyethyl methacrylate 141, styrene 210, Bu acrylate 141,
     4-hydroxybutyl acrylate 349.5, hexamethylene diacrylate 210, and 2-ethylhexyl
     acrylate 138 parts) containing hexakis(methoxymethyl)melamine was mixed with
     4% solution (33.5%) of neopentyl glycol sulfosuccinate (2:1). This
     composition had pot life >5 h, and a 25-\mu m film had Koenig pendulum hardness
     70 s after 6 days at room temperature, or 62 and 90 s when baked 30 min at 60^{\circ}
     and left 1 and 6 days, resp., at room temperature
     ICM C09D133-14
IC
     ICS C09D161-28
ICA C09D017-00
    C09D133-14, C09D147-00, C09D133-02, C09D135-00, C09D133-04, C09D125-04,
     C09D125-16, C09D133-18, C09D127-06, C09D131-04
     42-7 (Coatings, Inks, and Related Products)
CC
     Section cross-reference(s): 67
     acrylic polymer coating crosslinking; melamine resin crosslinker coating;
ST
     catalyst crosslinking acrylic coating; sulfosuccinate hydroxyalkyl
     catalyst crosslinking; neopentyl glycol sulfosuccinate catalyst;
     crosslinker acrylic polymer coating
     131756-82-6
     RL: TEM (Technical or engineered material use); USES (Uses)
        (coatings, low-temperature curable with good pot life, crosslinking
catalysts
       for)
     131756-82-6
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (coatings, low-temperature curable with good pot life, crosslinking
catalysts
        for)
RN
     131756-82-6 HCAPLUS
     2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl
CN
     2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, formaldehyde,
     1,6-hexanediyl di-2-propenoate, 4-hydroxybutyl 2-propenoate, methyl
     2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX
     NAME)
    CM
          1
    CRN 13048-33-4
```

CMF C12 H18 O4

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 108-78-1 CMF C3 H6 N6

CM 6

CRN 103-11-7 CMF C11 H20 O2

CM 7

CRN 100-42-5 CMF C8 H8

H 2 C === C H == P h

CM 8

CRN 80-62-6 CMF C5 H8 O2

CM 9

CRN 50-00-0 CMF C H2 O

H 2 C==O

^{=&}gt; d iall abeq tech abex 31-51
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE,
EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS'
- CONTINUE? (Y)/N:y

L271 ANSWER 31 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-420280 [39] WPIX

CROSS REFERENCE: 2004-499555

DOC. NO. CPI: C2004-157832 [39]

TITLE: New polymers having controlled structure and properties,

useful e.g. in detergent or skin or hair care

compositions, comprising amphoteric or zwitterionic part

and another separate part $% \frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}\right) +$

DERWENT CLASS: A18; A96; A97; D21; D25

INVENTOR: DESTARAC M; GEFFROY C; HARRISON I; HARRISSON I

PATENT ASSIGNEE: (RHOD-C) RHODIA CHIM; (RHOD-C) RHODIA CHIM SAS; (RHON-C)

RHONE-POULENC CHIM; (DEST-I) DESTARAC M; (GEFF-I) GEFFROY

C; (HARR-I) HARRISSON I

COUNTRY COUNT: 106

PATENT INFORMATION:

PA7	TENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
WO	2004044023	A1	20040527	(200439)*	FR	 28[0]	
FR	2846973	A1	20040514	(200441)	FR		
AU	2003292304	A1	20040603	(200470)	ΕN		
FR	2859209	A1	20050304	(200517)	FR		
EP	1558658	A1	20050803	(200551)	FR		
BR	2003016048	Α	20050913	(200561)	PT		
JΡ	2006505686	W	20060216	(200614)	JA	23	
CN	1735636	Α	20060215	(200643)	ZH		
US	20060217285	A1	20060928	(200664)	EN		
US	20070094809	A1	20070503	(200731)	ΕN		

APPLICATION DETAILS:

PATENT NO	KIND	API	PLICATION	DATE
WO 2004044023 FR 2846973 A1 FR 2859209 A1		FR	2003-FR3255 2002-13950 2003-10292	20021107
AU 2003292304			2003-292304	
BR 2003016048	3 A	BR	2003-16048	20031031
CN 1735636 A		CN	2003-801084	14 20031031
EP 1558658 A1	-	EΡ	2003-767870	20031031
EP 1558658 A1	-	WO	2003-FR3255	20031031
BR 2003016048	3 A	WO	2003-FR3255	20031031
JP 2006505686	5 W	WO	2003-FR3255	20031031
US 2006021728	35 A1	WO	2003-FR3255	20031031
JP 2006505686	5 W	JΡ	2005-506660	20031031
US 2006021728	35 A1	US	2006-534196	20060403
US 2007009480	9 A1	WO	2003-FR3183	20031027
US 2007009480	9 A1	US	2006-534197	20060413

FILING DETAILS:

PATENT NO	KIND	PAT	TENT NO	
777 0000000000				
AU 2003292304	A1 Based	on WO	2004044023 A	
EP 1558658 A1	Based	on WO	2004044023 A	

BR 2003016048 A Based on WO 2004044023 A JP 2006505686 W Based on WO 2004044023 A PRIORITY APPLN. INFO: FR 2003-10292 20030829 20021107 FR 2002-13950 INT. PATENT CLASSIF.: IPC ORIGINAL: A61K0008-00 [I,A]; A61Q0019-10 [I,A]; A61Q0005-02 [I,A]; C08F0291-00 [I,A]; C08F0293-00 [I,A]; C08F0293-00 [I,C]; C11D0003-37 [I,A]; C11D0003-37 [I,C]; C11D0003-00 [I,A]; C11D0003-00 [I,C] IPC RECLASSIF.: A61K0008-72 [I,C]; A61K0008-81 [I,A]; A61Q0019-00 [I,A]; A61Q0019-00 [I,C]; C08F0293-00 [I,A]; C08F0293-00 [I,C]; C11D0001-38 [I,C]; C11D0001-62 [I,A]; C11D0003-00 [I,A]; C11D0003-00 [I,C]; C11D0003-37 [I,A]; C11D0003-37 [I,C] ECLA: A61K0008-81K6; A61Q0019-00; C08F0293-00B; C11D0001-62; C11D0003-00B3L; C11D0003-37; C11D0003-37C8F USCLASS NCLM: 008/115.510 BASIC ABSTRACT: WO 2004044023 A1 UPAB: 20060121 NOVELTY - In new copolymers (I), having a controlled structure and comprising two separate parts, i.e. a part (A) comprising ionic (or potentially ionic) units and a part (B) which is not amphoteric or zwitterionic, part (A) is amphoteric or zwitterionic and comprises (i) cationic (or potentially cationic) units Ac, anionic (or potentially anionic) units Aa and optionally neutral, hydrophilic and/or hydrophobic units An or (ii) zwitterionic units Az and optionally units Ac, Aa and/or An. USE - The use of (I) is claimed in detergent compositions, washing care compositions or compositions for cleaning, treatment and/or protection of skin and/or hair. ADVANTAGE - (I) has a wide range of readily controllable properties, and can provide new physico-chemical systems. MANUAL CODE: CPI: A04-H00H; A12-V04; A12-W12; D11-A; D11-B19 TECH POLYMERS - Preferred Polymers: Part (B) is neutral, hydrophilic or hydrophobic (i.e. comprises neutral, hydrophilic and/or hydrophobic units). Preferably (I) consists of: (1) a block copolymer with at least two blocks, one of which corresponds to (A) (optionally with a concentration gradient) and one of which corresponds to (B), preferred being (A)-(B) diblock, (A)-(B)-(A) triblock or (B)-(A)-(B) triblock copolymers; (2) a comb or graft copolymer having side-chains corresponding to (A) and a backbone corresponding to (B) or vice versa; or (3) a star or microgel copolymer comprising a polymeric or non-polymeric core and peripheral polymeric chains, one part corresponding to the core and the other corresponding to the peripheral chains. Preferably part (B) is neutral and part (A) has a positive, negative or neural average charge. (I) is specifically in the form of powder, a dispersion in a liquid or a solution in a solvent. In particular (I) consists of a block copolymer with at least two blocks, one of which corresponds to (A) and one of which corresponds to (B), where the (A) part is a homopolymer (if it comprises Az units), a random copolymer or a copolymer with a concentration gradient. Preferred Cationic Monomers: Units Ac are derived from: (1) alpha, beta-monoethylenically unsaturated carboxylic acid omega-(N,N-dialkylamino)-alkylamides, e.g. N,N-dimethylaminomethyl (meth)acrylamide or the corresponding 2-(N,N-dimethylamino)-ethyl 3-(N,N-dimethylamino)-propyl or 4-(N,N-dimethylamino)-butyl compounds;

(2) alpha, beta-monoethylenically unsaturated aminoesters, e.g.

2-(N, N-dimethylamino)-ethyl (meth)acrylate or 3-(dimethylamino)-propyl,

- 2-(tert. butylamino)-ethyl, 2-(dipentylamino)-ethyl or 2-(diethylamino)-ethyl methacrylate;
- (3) vinylpyridines, vinylamine or vinylimidazolines;
- (4) monomers with amine precursor functions, e.g. N-vinyl-formamide or N-vinyl-acetamide (which form amine functions on simple acidic or basic hydrolysis);
- (5) ammonium-acryloyl(oxy) monomers, e.g. trimethylammonio-propyl methacrylate chloride, trimethylammonioethyl-(meth)acrylamide chloride or bromide, trimethylammoniobutyl-(meth)acrylamide

 $\label{lem:methylam} \verb|methylam| trimethylam| amoniopropyl-methacrylam| de methylsulfate, (3-(meth)acrylam| dopropyl)-trimethylam| chloride,$

methacryloyloxyethyl-trimethylammonium chloride or methylsulfate or acryloyloxyethyl-trimethylammonium chloride;

- (6) 1-ethyl-(2 or 4)-vinyl-pyridinium bromide, chloride or methylsulfate;
- (7) N, N-dialkyldiallyl-ammonium monomers, e.g. N, N-dimethyldiallyl-ammonium chloride; or
- (8) polyquaternium monomers, e.g. N-(3-chloro-2-hydroxypropyl)-trimethylammonium dimethylaminopropyl methacrylamide chloride. Preferred Anionic Monomers: Units Aa are derived from:
- (1) monomers having at least one carboxy function, such as alpha, beta-monoethylenically unsaturated carboxylic acids or their anhydrides, e.g. (meth)acrylic, maleic, fumaric or itaconic acid, N-methacryloxy-alanine or N-acryloyl-glycine (or corresponding anhydrides or water-soluble salts);
- (2) monomers with carboxylate precursor functions, e.g. tert.

 butyl acrylate (which forms carboxy functions on
 hydrolysis after polymerization);
- (3) monomers having at least one sulfate or sulfonate function, e.g. 2-sulfooxy-ethyl methacrylate, vinylbenzene-sulfonic acid, allylsulfonic acid, 2-acrylamido-2-methylpropane-sulfonic acid, sulfoethyl (meth)acrylate, sulfopropyl (meth)acrylate or their water -soluble salts; or
- (4) monomers having at least one phosphate or phosphonate function, e.g. vinyl-phosphonic acid, ethylenically unsaturated (such as phosphates derived from hydroxyethyl methacrylate or plyoxyalkylene methacrylates) or their water-soluble salts.

Preferred Neutral Monomers: Units An are derived from:

- (1) vinyl aromatic monomers, e.g. styrene, alpha-methyl-styrene or vinyltoluene;
- (2) vinyl(idene) halides, e,q, vinyl(idene) chloride;
- (3) alpha, beta-monoethylenically unsaturated carboxylic acid esters, e.g. methyl, ethyl or <u>butyl</u> (meth)<u>acrylate</u> or 2-ethylhexyl acrylate;
- (4) vinyl or allyl esters of saturated carboxylic acids, e.g. vinyl or allyl acetate, propionate, versatate or stearate;
- (5) alpha, beta-monoethylenically unsaturated nitriles, e.g.
 (meth)acrylonitrile;
- (6) alpha-olefins, e.g. ethylene;
- (7) conjugated dienes, e.g. butadiene, isoprene or chloroprene;
- (8) monomers providing polydimethylsiloxane chains;
- (9) alpha, beta-monoethylenically unsaturated carboxylic acid hydroxyalkyl esters, e.g. hydroxyethyl or hydroxypropyl (meth)acrylate or glycerol monomethacrylate;
- (10) alpha, beta-monoethylenically unsaturated amides, e.g. acrylamide, N, N-dimethyl-methacrylamide or N-methylol-acrylamide;
- (11) alpha, beta-ethylenically unsaturated monomers having a water -soluble polyethylene oxide chain, e.g. polyethylene oxide alpha-methacrylate or alpha, omega-dimethacrylate, omega-behenyl polyethylene oxide alpha-methacrylate or omega-tristyrylphenyl polyethylene oxide alpha-methacrylate;

- (12) alpha, beta-ethylenically unsaturated monomers with precursors for hydrophilic units or segments, e.g. vinyl acetate (which forms vinyl alcohol units or segments on hydrolysis after polymerization);
- (13) vinylpyrrolidone; or
- (14) alpha, beta-ethylenically unsaturated monomers of ureido type, especially methacrylamidoethyl-2-imidazolidinone.

Preferred Zwitterionic Monomers: Units Az are derived from:

- (1) sulfobetaine monomers, such as sulfopropyl dimethylammonium ethyl methacrylate, sulfopropyl dimethylammonium ethyl methacrylamide or sulfopropyl 2-vinylpyridinium;
- (2) phosphobetaine monomers, e.g. phosphatoethyl dimethylammonium ethyl methacrylate; or
- (3) carboxybetaine monomers.

Preferred Neutral Monomers: Units An are derived from:

- (1) vinyl aromatic monomers, e.g. styrene, alpha-methyl-styrene or vinyltoluene;
- (2) vinyl(idene) halides, e,g, vinyl(idene) chloride;
- (3) alpha, beta-monoethylenically unsaturated carboxylic acid esters, e.g. methyl, ethyl or butyl (meth)acrylate or 2-ethylhexyl acrylate;
- (4) vinyl or allyl esters of saturated carboxylic acids, e.g. vinyl or allyl acetate, propionate, versatate or stearate;
- (5) alpha, beta-monoethylenically unsaturated nitriles, e.g. (meth)acrylonitrile;
- (6) alpha-olefins, e.g. ethylene;
- (7) conjugated dienes, e.g. butadiene, isoprene or chloroprene; or
- (8) monomers providing polydimethylsiloxane chains.

Preparation: (I) are prepared by controlled radical polymerization (claimed).

ABEX EXAMPLE - A mixture of 124.2 g ethanol, 13.54 g O-ethyl-S-(1methoxycarbonyl)-ethyl)-xanthate and 65 g butyl acrylate was heated to 70degreesC under argon, treated with 4.27 g azo-bis-isobutyronitrile (AIBN) and reacted for 2 hours at this temperature, giving a polymer of number average molecular weight 1800. The reaction mixture was treated at 70degreesC with 2.13 g AIBN then treated over 4 hours with a mixture of 173.3 g acrylic acid, 404.7 g quaternized 2-dimethylaminoethyl acrylate, 335 g water and 335 g ethanol, 3.2 g portions of AIBN being added after 2 hours and 4 hours of the addition. Reaction was continued for a further 2 hours, giving a diblock copolymer consisting of polybutyl acrylate and acrylic acid-quaternized 2-dimethylaminoethyl acrylate random copolymer blocks.

L271 ANSWER 32 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-843366 [78] WPIX

DOC. NO. CPI: C2003-236949 [78]

TITLE: Reshapable hair styling composition includes (meth)

acrylic copolymer(s) comprising units derived from

monomer(s) comprising butyl (meth)

acrylate monomers, and from monomer(s) comprising

hydroxy alkyl (meth) acrylate monomers

DERWENT CLASS: A14; A96; D21

INVENTOR: ROLLAT I; ROLLAT-CORVOL I; SAMAIN H

(OREA-C) L'OREAL SA 32 PATENT ASSIGNEE:

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC ______ US 20030147833 A1 20030807 (200378)* EN 19[0]

```
EP 1336401 A1 20030820 (200378) EN
JP 2003192543 A 20030709 (200378) JA 17
EP 1336401 B1 20070808 (200753) EN
DE 60221635 E 20070920 (200763) DE
```

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
US 20030147833	A1	US 2001-22253 20011220
EP 1336401 A1		EP 2002-293039 20021209
EP 1336401 B1		EP 2002-293039 20021209
JP 2003192543	A	JP 2002-368798 20021219
DE 60221635 E		DE 2002-621635 20021209
DE 60221635 E		BP 2002-293039 20021209

FILING DETAILS:

PATENT NO	KIND)	PATENT NO	
DE 60221635	E	Based on	EP 1336401	А

PRIORITY APPLN. INFO: US 2001-22253 20011220

INT. PATENT CLASSIF.:

MAIN: A61K007-06 SECONDARY: A61K007-11 IPC ORIGINAL: A61K0008-31

IPC ORIGINAL:

A61K0008-81 [I,A]; A61K0008-86 [I,A];

A61Q0005-06 [I,A]; C08L0033-00 [I,A];

A61K0008-72 [I,C]; A61K0008-72 [I,C];

A61K0008-81 [I,A]; A61K0008-86 [I,A];

A61Q0005-06 [I,C]; A61Q0005-06 [I,A];

<u>A6100005-06</u> [I,C]; C08L0033-00 [I,C]; C08L0033-00

[I,A]; C08L0033-00 [I,C]

IPC RECLASSIF.: A61K0008-00 [I,A]; A61K0008-00 [I,C]; A61K0008-04 [I,A]; A61K0008-04 [I,C];

A61K0008-04 [1,A]; A61K0008-04 [1,C]; A61K0008-30 [1,C]; A61K0008-34 [1,A]; A61K0008-37 [1,A]; A61K0008-64 [1,A]; A61K0008-72 [1,C]; A61K0008-81 [1,A]; A61K0008-86 [1,A]; A61K0008-99 [1,A]; A61K0008-891 [1,A]; A61K0008-92 [1,A];

A61K0008-92 [1,A]; A61K0008-96 [1,C]; A61K0008-97 [1,A]; A61K0008-98 [1,A]; A61Q0005-00 [1,A]; A61Q0005-00 [1,C]; A61Q0005-06 [1,A]; A61Q0005-06 [1,C];

C08F0220-00 [I,C]; C08F0220-12 [I,A]; C08F0008-00 [I,A];

C08F0008-00 [I,C]

ECLA: A61K0008-81K4; A61K0008-81K6; A61K0008-81M; A61K0008-81R;

A61K0008-81R2; A61K0008-86; A61Q0005-06

ICO: K61K0201:21; K61K0201:32

USCLASS NCLM: 424/070.160

BASIC ABSTRACT:

US 20030147833 A1 UPAB: 20050531

NOVELTY - A reshapable hair styling composition (I) comprises (meth)acrylic copolymer(s) comprising units derived from first monomer(s) comprising butyl (meth)acrylate monomers; units derived from second monomer(s) comprising hydroxy alkyl (meth)acrylate monomers; and optional units derived from a co-polymerizable monomer(s) other than the above-mentioned monomers.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) An aerosol device comprising a vessel which comprises an aerosol composition of (I), and a propellant; and a dispenser; and

(2) A method of manufacturing (I).

 \mbox{USE} - The composition is used for treating hair comprising applying the composition to hair before, during or after shaping a hairstyle and for reshaping hair (all claimed).

 ${\tt ADVANTAGE}$ — The composition provides a reshapable effect and is a non-rinse composition.

MANUAL CODE: CPI: A04-F06E5; A12-V04A; D08-B05

TECH

POLYMERS - Preferred Component: The first monomer comprises isobutyl (meth)acrylate, t-butyl (meth) acrylate, 2-methylbutyl (meth)acrylate, or preferably n-butyl (meth)acrylate. The first monomer comprises hydroxy propyl (meth)acrylate, or preferably 2-hydroxy ethyl (meth) acrylate. The co-polymerizable monomer(s) comprises alkyl (meth)acrylate monomers, polar monomers, or ethylenically unsaturated free radically polymerizable monomers. The alkyl (meth)acrylate monomers comprise methyl (meth)acrylate, isobornyl (meth)acrylate, ethyl (meth)acrylate, isooctyl (meth)acrylate, or 2-ethyl hexyl (meth)acrylate. The <u>polar</u> monomers comprises (meth)acrylic acids, itaconic acids, N-vinyl pyrrolidones, N-vinyl caprolactams, (meth)acrylamides, dimethylaminoethyl (meth)acrylates, acrylonitriles, 2-carboxyethyl (meth)acrylates, maleic anhydrides, or methoxypolyethylene glycol 550 monoacrylates. The ethylenically unsaturated free radically polymerizable monomers comprise styrene or 1-4C vinyl esters. At least one (meth)acrylic copolymer is emulsion.

ABEX EXAMPLE - A mixture (in grams) of 2-ethyl hexyl acrylate (2-EHA) (300), n-butyl acrylate (BA) (175), and 2-hydroxy ethyl methacrylate (HEMA) (25) was prepared yielding monomer solution (500) containing 60/35/5 parts 2-EHA/BA/HEMA. Of the total monomer solution, 50 g was charged into a resin flask along with deionized water (380) and RHODACAL DS-10 (RTM) (0.5). The contents were heated to 60 degreesC while stirring at 350 rpm. A solution of potassium persulfate initiator (1) in deionized water (20) was charged, the flask sealed, and a vacuum. The flask was held at 60 degreesC for 20 minutes, then heated to 80 degreesC for 10 minutes to yield a seed polymer. A pre-emulsion of the remaining monomer solution (450) was prepared by charging a solution of sodium dodecyl benzene sulfonate (4.5) in deionized water (211), and stirring under nitrogen. This pre-emulsion was added dropwise at a rate of 6 g/minute. The addition took almost 2 hours. After the addition, the stirring rate was reduced to 200 rpm and the reaction was held at 80 degreesC for 2 hours, then the resulting latex was filtered through doubled over cheesecloth into a jar.

L271 ANSWER 33 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-620080 [59] WPIX

DOC. NO. CPI: C2003-169234 [59]

TITLE: Repositionable hair styling composition includes a

copolymer comprising <u>butyl</u> (meth)

acrylate units and hydroxyalkyl (meth)acrylate

units

DERWENT CLASS: A14; A25; A96; D21

INVENTOR: PERRON B; RESTLE S; ROLLAT I; ROLLAT-CORVOL I; SAMAIN H;

ROLLAT C I

PATENT ASSIGNEE: (OREA-C) L'OREAL SA; (PERR-I) PERRON B; (REST-I) RESTLE

S; (ROLL-I) ROLLAT I; (SAMA-I) SAMAIN H

COUNTRY COUNT: 37

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC

```
      EP 1321130
      A2 20030625 (200359)* FR
      29[0]

      CA 2415251
      A1 20030620 (200359) FR

      US 20030147834
      A1 20030807 (200359) EN

      JP 2003226624
      A 20030812 (200362) JA 27

      KR 2003053429
      A 20030628 (200373) KO

      CN 1451371
      A 20031029 (200409) ZH

      US 20040057923
      A9 20040325 (200422) EN

      BR 2002005596
      A 20040803 (200454) PT

      EP 1321130
      B1 20051130 (200579) FR

      DE 60207671
      E 20060105 (200619) DE

      ES 2254626
      T3 20060616 (200641) ES

      MX 2002012592
      A1 20060301 (200649) ES

      DE 60207671
      T2 20060824 (200656) DE

      KR 546985
      B1 20060126 (200682) KO

      MX 242493
      B 20061206 (200744) ES
```

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
EP 1321130 A2	EP 2002-293142 20021218
US 20030147834 A1	US 2001-23330 20011220
US 20040057923 A9	US 2001-23330 20011220
MX 2002012592 A1	MX 2002-12592 20021217
DE 60207671 E	DE 2002-607671 20021218
DE 60207671 T2	DE 2002-607671 20021218
DE 60207671 E	EP 2002-293142 20021218
ES 2254626 T3	EP 2002-293142 20021218
DE 60207671 T2	EP 2002-293142 20021218
CA 2415251 A1	CA 2002-2415251 20021219
CN 1451371 A	CN 2002-151649 20021219
BR 2002005596 A	BR 2002-5596 20021220
JP 2003226624 A	JP 2002-371152 20021220
KR 2003053429 A	KR 2002-81729 20021220
KR 546985 B1	KR 2002-81729 20021220
MX 242493 B	MX 2002-12592 20021217

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60207671	E	Based on	EP 1321130	Α
ES 2254626	Т3	Based on	EP 1321130	Α
DE 60207671	T2	Based on	EP 1321130	Α
KR 546985	В1	Previous Publ	KR 2003053429	Α

PRIORITY APPLN. INFO: US 2001-23330 20011220

INT. PATENT CLASSIF.:

MAIN: A61K007-06; A61K007-11

IPC ORIGINAL: A61K0007-06 [I,A]; A61K0007-11 [I,A]; A61K0008-72

[I,A]; A61K0008-72 [I,C]; A61K0008-81 [I,A]; A61Q0005-06 [I,A]; A61Q0005-06 [I,C]; A61Q0005-12 [I,C]; A61Q0005-12

IPC RECLASSIF.:

A61K0008-00 [I,A]; A61K0008-00 [I,C]; A61K0008-04 [I,A]; A61K0008-04 [I,C]; A61K0008-30 [I,C]; A61K0008-34 [I,A]; A61K0008-64 [I,A]; A61K0008-72 [I,C]; A61K0008-72 [I,A]; A61K0008-73 [I,A]; A61K0008-81 [I,A]; A61Q0005-02 [I,A];

```
A61Q0005-02 [I,C]; A61Q0005-06 [I,A];
A61Q0005-06 [I,C]; A61Q0005-06 [I,A];
A61Q0005-12 [I,A]; A61Q0005-12 [I,C];
C08F0220-00 [I,C]; C08F0220-12 [I,A]; C08L0033-00 [I,A];
C08L0033-00 [I,C]
ECLA: A61K0008-81K4; A61K0008-81R; A61Q0005-06; A61Q0005-12
ICO: K61K0201:21
USCLASS NCLM: 424/070.160
BASIC ABSTRACT:
EP 1321130 A2 UPAB: 20060202
```

MOVELTY - Popositionable hair

NOVELTY - Repositionable hair styling composition includes a copolymer comprising butyl (meth) acrylate units, hydroxyalkyl (meth) acrylate units and optionally comonomer units. The (meth) acrylic copolymers are not copolymers of n-butyl acrylate/2-hydroxyethyl acrylate/methyl methacrylate of weight % ratio of monomers of 65/15/20 or 75/15/10.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a <u>cosmetic</u> hair treatment method comprising applying the above composition to hair before styling the hair;
- (2) a hair deformation method comprising applying the above composition to hair before initial styling and then styling the hair at least once without the need for any additional composition or heat.

USE - The composition is especially useful as a rinse-off hair styling product, as a shampoo (claimed) or conditioner (claimed).

ADVANTAGE - Hair treated with the composition can be restyled repeatedly without the need for any additional composition or heat. MANUAL CODE: CPI: A04-F06E5; A12-V04A; D08-B03; D08-B04 TECH

POLYMERS - Preferred Monomers: The <u>butyl</u> (meth)<u>acrylate</u> monomer is n-butyl (meth)<u>acrylates</u>, iso-butyl (meth)<u>acrylates</u> or 2-methylbutyl (meth)<u>acrylates</u>, preferably n-butyl acrylate.

The hydroxyalkyl (meth)acrylate is 2-hydroxyethyl (meth)acrylates, or hydroxypropyl (meth)acrylates, preferably 2-hydroxyethyl methacrylate. The optional monomer is an alkyl (meth)acrylate from methyl (meth)acrylates, isobornyl (meth)acrylates, ethyl (meth)acrylates, iso-octyl (meth)acrylates or 2-ethylhexyl (meth)acrylates, preferably 2-ethylhexyl methacrylate.

Alternatively the optional monomer is a <u>polar</u> monomer from (meth)acrylic acids, itaconic acids, N-vinylpyrrolidones, N-vinylcaprolactams, (meth)acrylamides, dimethylamino (meth)acrylates, acrylonitriles, 2-carboxyethyl (meth)acrylates, maleic anhydrides or monoacrylates of methoxypolyethylene glycol 550.

Alternatively the optional monomer is a free radically polymerizable monomer from styrene or 1--4C vinyl esters.

Preferred Copolymer: The copolymer is crosslinked with at least one polyfunctional crosslinking agent. The copolymer comprises 10-90 (30-40) wt.% <u>butyl</u> (meth) <u>acrylates</u>, 2-50 (2-10) wt.%

hydroxyalkyl (meth)acrylates and 0-80 (50-70) wt.% copolymerisable monomers other than the butyl (meth)acrylates and

hydroxyalkyl (meth)acrylates. It preferably comprises 30-40 wt.% n-butyl acrylate, 2-10 wt.% 2-hydroxyethyl (meth)acrylate and 50-70 wt.% 2-ethylhexyl acrylate.

Preferred Composition: The copolymer is present in 0.01-40 (0.1-15) wt.% of the total composition. The composition includes a <u>cationic</u> polymer from quaternized cellulose ethers, quaternized guar gum, <u>cationic</u> cyclo polymers especially of diallyl dimethyl ammonium chloride (co)polymer, quaternized vinylpyrrolidone and vinyl imidazole polymers and/or crosslinked and non-crosslinked salts of 1-4C trialkyl 1-4C ammonium methacryloyloxyalkyl, preferably diallyl dimethyl ammonium

chloride (co)polymer. The cationic polymer is 0.001-20 (0.-3) wt.% of the final composition.

Preferred Properties: The copolymer has a glass transition temperature (Tg) of -100-15 degreesC.

ORGANIC CHEMISTRY - Preferred Component: The polyfunctional crosslinking agent is from divinyl benzene, alkyl diacrylates, alkyl triacrylates, alkyl tetraacrylate, monoethylenically unsaturated aromatic ketones, multifunctional aziridine amides or metallic crosslinkers.

Preferred Composition: The composition also comprises at least one from reducing agents, silanes, fatty materials, thickeners, plasticizers, anti foaming agents, hydrating agents, fillers, sun filters, active hair care agents, perfumes, preservatives, cationic surfactants, anionic surfactants, non-ionic surfactants, amphoteric surfactants, cationic polymers, anionic polymers, non-ionic polymers, amphoteric polymers, polyols, proteins, provitamins, vitamins, colorants, dyeing products, decolorizing agents or pH modifying agents (preferably cationic polymers).

The composition comprises at least one surfactant from an anionic or cationic surfactant and/or at least one conditioner. The surfactant is present in 0.1-40 wt.% of the final composition. Preferred Form: The composition comprising at least one (meth)acrylic copolymer comes in a form from sprays, aerosols, mousses, gels, lotions, creams, dispersions or emulsions.

ABEX EXAMPLE - A copolymer A was prepared from 2-ethylhexyl acrylate (300 q), n-butyl acrylate (175 g) and 2-hydroxyethyl methacrylate (25 g). - A shampoo comprised (wt.% active material): copolymer A (3.75), Merquat 1050 (RTM) (0.28), sodium laureth sulfate (9), cocoa betaine (5.25), Varisoft PATC (RTM) (0.7), perfume/preservative (qs) and water (to 100). A comparative composition contained: copolymer A (3.75), Merquat 550 (RTM; diallyl dimethyl ammonium chloride (co)polymer) (0.28), sodium laureth sulfate (9), cocoa betaine (5.25), Varisoft PATC (RTM) (0.7), perfume/preservative (qs) and water (to 100). The composition gave good cosmetic properties and a repositionable result compared to the comparative composition.

L271 ANSWER 34 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-600225 [57] WPIX

DOC. NO. CPI: C2003-163105 [57]

Preparation of thermotropic liquid crystal polymer TITLE:

microcapsules in <u>cosmetic</u> composition, involves emulsifying solution of thermotropic liquid crystal and monomer followed by suspension polymerizing resulting

emulsion

DERWENT CLASS: A14; A96; D21; P81

CHANG I S; CHANG Y S; HAN S H; JANG I S; JOO H G; JU H G; INVENTOR:

JU H K; KANG H H; KIM H; KIM H G; KIM H K; KIM J U; KIM J

W; KIN S; KWON S S; KYO K; LEE O S

PATENT ASSIGNEE: (AMOR-N) AMOREPACIFIC CORP; (CHAN-I) CHANG I S; (HANS-I)

> HAN S H; (JUHK-I) JU H K; (KANG-I) KANG H H; (KIMH-I) KIM H K; (KIMJ-I) KIM J W; (LEEO-I) LEE O S; (PACI-N) PACIFIC CORP; (PACI-N) PACIFIC SYSTEMS INC; (TAIH-N) TAIHEIYO

KAGAKU KK

COUNTRY COUNT: 33

PATENT INFORMATION:

F	ATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
E	IP 1304161	A1	20030423	(200357)*	EN	21[4]	
-	P 2003131201	A	20030508	(200357)	JA	17	

```
KR 2003033224 A 20030501 (200357) KO
US 20030129247 A1 20030710 (200357) EN
KR 2003071312 A 20030903 (200404) KO
KR 422760 B 20040316 (200444) KO
US 7041304 B2 20060509 (200632) EN
EP 1304161 B1 20070228 (200718) EN
```

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
EP 1304161 A1	EP 2002-15437 20020711
KR 2003033224 A	KR 2001-64664 20011019
KR 422760 B	KR 2001-64664 20011019
KR 2003071312 A	KR 2002-10961 20020228
JP 2003131201 A	JP 2002-212804 20020722
US 20030129247 A1	US 2002-207199 20020730
US 7041304 B2	US 2002-207199 20020730

FILING DETAILS:

PATENT NO	KIND	PATENT NO
KR 422760 B	Previous Publ	KR 2003033224 A

PRIORITY APPLN. INFO: <u>KR 2002-10961 20020228</u>
<u>KR 2001-64664 20011019</u>

INT. PATENT CLASSIF.:

MAIN: B01J013-14

IPC ORIGINAL: A61K0009-14 [I,A]; A61K0009-14 [I,C]; B01J0013-06 [I,C];

B01J0013-16 [I,A]

IPC RECLASSIF.: <u>A61K0008-00</u> [I,A]; <u>A61K0008-00</u> [I,C];

A61K0008-02 [I,A]; A61K0008-02 [I,C]; A61K0008-04 [I,C]; A61K0008-06 [I,A]; A61K0008-06 [I,A]; A61K0008-11 [I,C]; A61K0008-30 [I,C]; A61K0008-30 [I,C]; A61K0008-35 [I,A]; A61K0008-36 [I,A]; A61K0008-49 [I,A]; A61K0008-63 [I,A]; A61K0008-72 [I,A]; A61K0008-72 [I,A]; A61K0008-81 [I,A]; A61K0008-89 [I,A];

A61K0008-81 [I,A]; A61K0008-89 [I,A]; A61K0008-891 [I,A]; A61K0008-96 [I,A]; A61K0008-96 [I,C]; A61K0008-97 [I,A]; A61Q0001-00 [I,A]; A61Q0001-00 [I,C]; A61Q0001-02 [I,C]; A61Q0001-04 [I,A]; A61Q0001-06 [I,A]; A61Q0001-12 [I,A]; A61Q0001-12 [I,C]; A61Q0019-00 [I,A];

A6100019-00 [I,C]; B01J0013-06 [I,C]; B01J0013-14

[I,A]; B01J0013-14 [I,A]; B01J0013-16 [I,A]; G02F0001-13

[I,A]; G02F0001-13 [I,C]; G02F0001-1334 [I,A]

ECLA: A61K0008-02H; A61K0008-11C; A61K0008-81K2; A61Q0001-00;

A61Q0001-06; A61Q0001-12; A61Q0019-00; B01J0013-16

USCLASS NCLM: 424/401.000

NCLS: 264/004.100; 264/004.300; 264/004.330; 264/004.700;

424/489.000; 424/490.000

BASIC ABSTRACT:

EP 1304161 A1 UPAB: 20050706

NOVELTY - Thermotropic liquid crystal and monomer (M) are dissolved in a solvent and then an initiator is added. The resulting solution is emulsified in aqueous phase in the presence of a dispersion stabilizer. The resulting

emulsion is suspension polymerized in the presence of a polymerization inhibitor to obtain thermotropic liquid crystal polymer microcapsules (I). DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) A cosmetic composition containing (I); and
- (2) Stabilization of an active ingredient by loading with (I).

USE - The process is used for preparing thermotropic liquid crystal polymer microcapsule as an additive for visual effect in a cosmetic composition such as skin softeners, nutrient todlet water, massage creams, nutrient creams, packs, gels, essences, lipsticks, makeup bases, foundation, lotions, ointments, gels, creams, patches and spray, and as a stabilizing media for stabilizing active ingredient in a <u>cosmetic</u> base, such as retinol, retinyl acetate, retinyl palmitate, tocopherol, tocopheryl acetate, tocopheryl linolate, tocopheryl nicotinate, linoleic acid, coenzyme Q-10, resveratrol, and plant extracting essential oil (claimed). The polymer microcapsule is also used in a drug-delivery system, electronic materials, coating material and paper stock.

ADVANTAGE - The cosmetic composition containing liquid crystal crosslinked polymer microcapsules, maintains efficiency of active ingredients for a long time. The active ingredients are first stabilized by fixation within liquid crystal due to the molecular arrangement and doubly stabilized by polymer surrounding the liquid crystals. In order to further elevate the stability of active ingredients, copolymer having crosslinkable functional groups is used. The copolymer can crosslink with the polymer surrounding liquid crystals and completely protect active ingredients within liquid crystal from external irritation. The polymer microcapsules have good compatibility with organic compounds and exhibit behavior of liquid crystal depending on temperature. MANUAL CODE: A02-C; A08-S05; A09-A02A; A10-B03; A10-B05;

A12-V04; D08-B

TECH

POLYMERS - Preferred Process: A crosslinkable copolymer, and 0.1-0.3 wt.% of crosslinking agent, are added during dissolution of thermotropic liquid crystal and monomer (M) in solvent. A <u>cationic</u> monomer, anionic monomer or hydrophilic monomer is also added to obtain hydrated microcapsules.

Preferred Copolymer: The crosslinkable copolymer is obtained by copolymerizing monomer (M) and a monomer having crosslinkable functional

Preferred Monomers: The monomer with crosslinkable functional group is trichlorovinylsilane, trimethoxyvinylsilane, triethoxyvinylsilane, vinyltriisopropoxysilane, vinyl tri-t- butoxysilane, vinyltriphenoxysilane, vinyltriacetoxysilane, vinyl tri(isobutoxy)silane, vinyltri(2-methoxyethoxy)silane, 8-oct-1- enyltrichlorosilane, 8-oct-1-envltrimethoxysilane, 8-oct-1- envltriethoxysilane, 6-hex-1-enyltrichlorosilane or 6-hex-1- enyltriethoxysilane, and is used in an amount of 0.1-50 wt.% based on the total weight of the monomer. The monomer (M) is styrene, p- or m-methylstyrene, p- or m- ethylstyrene, por m-chlorostyrene, p- or m-chloromethylstyrene, styrene sulfonic acid, por m-t-butoxystyrene, methyl (meth)acrylate, ethyl(meth)acrylate, propyl(meth)acrylate, n- butyl(meth)acrylate

, isobutyl(meth)acrylate, t- butyl(meth)

acrylate, 2-ethylhexyl(meth)acrylate, n- octyl(meth)acrylate, lauryl(meth)acrylate, stearyl(meth)acrylate, 2-hydroxyethyl(meth)acrylate, polyethylene glycol(meth)acrylate, methoxypolyethylene glycol(meth)acrylate, glycidyl(meth)acrylate, dimethylaminoethyl (meth) acrylate, diethylaminoethyl (meth) acrylate, vinyl acetate, vinyl propionate, vinyl butyrate, vinyl ether, allylbutyl ether, allylglycidyl ether, (meth)acrylic acid, maleic acid,

alkyl(meth)acrylamide and/or (meth)acrylonitrile.

ORGANIC CHEMISTRY - Preferred Compounds: The thermotropic liquid crystal

is cholesterol or cholesteryl derivative and is used in an amount of 0.1-50 wt.% based on the total weight of the microcapsule particle. The cholesteryl derivative is cholesteryl octanoate, cholesteryl nonanoate, cholesteryl oleyl carbonate, or cholesteryl isostearyl carbonate. The active ingredient is retinol, retinyl acetate, retinyl palmitate, tocopherol, tocopheryl acetate, tocopheryl linolate, tocopheryl nicotinate, linoleic acid, coenzyme Q-10, resveratrol, or plant extracting essential oil.

ABEX EXAMPLE - Cholesteryl nonanoate (in wt.%) (30), methylmethacrylate monomer (70), methacrylic acid (15) and ethylene glycol dimethyl ether as crosslinking agent (0.3) were dissolved uniformly in methylene chloride (200 ml) under irradiation of ultrasonic wave. 2,2'-azobis(2methylbutyronitrile) initiator (1) was added. The resulting solution was added into 1.5% aqueous solution of polyvinyl alcohol with saponification value of 87-89% and then emulsified under 5000 rpm of shear stress for 5 minutes. The resulting emulsion and sodium nitrate (0.01) were introduced into a reactor heated at 60 degreesC and then polymerized for 4 hours. After polymerization was terminated, the organic solvent was evaporated under reduced pressure. The residue was filtered, washed with distilled water and then dried to obtain cholesterol liquid crystal microcapsules as powders. A transparent gel type soluble formulation containing glycerine (5), propylene glycol (4), microcapsule (5), ethanol (10), sodium acrylate (0.5), preservative and distilled water, was prepared. The microcapsules exhibited behavior of liquid crystal in cosmetic formulation. Such a visual effect of liquid crystal can impart peculiarity to cosmetic composition and brilliance to appearance of goods, to be expected to elevate commercial value.

L271 ANSWER 35 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-443831 [47] WPIX

DOC. NO. CPI: C2002-126238 [47]

TITLE: Polymers used in skin cosmetic formulations and

in decorative <u>cosmetics</u> are obtained by free

radical polymerization of vinyl carboxylate, compound

containing polyether and optionally other comonomer(s)

DERWENT CLASS: A14; A25; A26; A96; D21

INVENTOR: DIEING R; GOTSCHE M; JENTZSCH A; WOOD C

PATENT ASSIGNEE: (BADI-C) BASF AG; (DIEI-I) DIEING R; (GOTS-I) GOTSCHE M;

(JENT-I) JENTZSCH A; (WOOD-I) WOOD C

COUNTRY COUNT: 94

PATENT INFORMATION:

PAT	TENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
	2002015065	7.0					
WO	2002015865	AΖ	20020228	(200247)*	DE	64[0]	
ΑU	2001095467	А	20020304	(200247)	ΕN		
DE	10041220	A1	20020307	(200247)	DE		
ΕP	1313444	A2	20030528	(200336)	DE		
US	20030224025	A1	20031204	(200380)	ΕN		
JP	2004506673	W	20040304	(200417)	JA	124	
EP	1313444	В1	20041117	(200476)	DE		
DE	50104558	G	20041223	(200501)	DE		
AU	2001295467	A8	20050908	(200568)	EN		

APPLICATION DETAILS:

PATENT NO	KIND 	APPLICATION	DATE
WO 2002015865 .	A2	WO 2001-EP943	

```
10/824,298
DE 10041220 A1
                                           DE 2000-10041220 20000822
AU 2001095467 A
                                           AU 2001-95467 20010816
AU 2001295467 A8
                                           AU 2001-295467 20010816
                                           DE 2001-50104558 20010816
DE 50104558 G
                                           EP 2001-976085 20010816
EP 2001-976085 20010816
EP 2001-976085 20010816
EP 1313444 A2
EP 1313444 B1
DE 50104558 G
EP 1313444 A2
                                           WO 2001-EP9438 20010816
US 20030224025 A1
                                           WO 2001-EP9438 20010816
JP 2004506673 W
                                           WO 2001-EP9438 20010816
                                           WO 2001-EP9438 20010816
EP 1313444 B1
                                           WO 2001-EP9438 20010816
JP 2002-520775 20010816
DE 50104558 G
JP 2004506673 W
                                           US 2003-362059 20030220
US 20030224025 A1
```

FILING DETAILS:

PATENT NO	KIND			PA:	TENT NO
DE 50104558 G		Based	on	EP	1313444 A
AU 2001095467	A	Based	on	WO	2002015865 A
EP 1313444 A2		Based	on	WO	2002015865 A
JP 2004506673	W	Based	on	WO	2002015865 A
EP 1313444 B1		Based	on	WO	2002015865 A
DE 50104558 G		Based	on	WO	2002015865 A
AU 2001295467	A8	Based	on	WO	2002015865 A

PRIORITY APPLN. INFO: DE 2000-10041220 20000822

INT. PATENT CLASSIF.:

MAIN: A61K007-00; A61K007-48

A61K007-025; A61K007-032; A61K007-15; A61K007-16; SECONDARY:

```
A61K007-48; A61K007-50
                              A61K0008-00 [I,A]; A61K0008-00 [I,C];

A61K0008-02 [I,A]; A61K0008-02 [I,C];

A61K0008-04 [I,C]; A61K0008-06 [I,A];
 IPC RECLASSIF.:
                              A61K0008-72 [I,A]; A61K0008-72 [I,C];
                              A61K0008-81 [I,A]; A61K0008-89 [I,A];
                              A61K0008-91 [I,A]; A61Q0001-00 [I,A];
                              A61Q0001-00 [I,C]; A61Q0001-02 [I,A];
                              A61Q0001-02 [I,C]; A61Q0001-04 [I,A];
A61Q0001-06 [I,A]; A61Q0001-10 [I,A];
                              A61Q0001-12 [I,A]; A61Q0001-12 [I,C];
                              A61Q0011-00 [I,A]; A61Q0011-00 [I,C];
                              A61Q0017-04 [I,A]; A61Q0017-04 [I,C];
                              A6100019-00 [I,A]; A6100019-00 [I,C];
A6100019-10 [I,A]; A6100019-10 [I,C];
A6100009-02 [I,A]; A6100009-02 [I,C];
                              C08F0002-44 [I,A]; C08F0002-44 [I,C]; C08F0283-00 [I,C];
ECLA:
                              A61K0008-02F; A61K0008-91; A61Q0001-02; A61Q0001-04;
```

C08F0283-06 [I,A]; C08F0008-00 [I,C]; C08F0008-12 [I,A] A61Q0001-06; A61Q0001-10; A61Q0009-02; A61Q0011-00;

A61Q0017-04; A61Q0019-00; A61Q0019-10

ICO: K61K0201:08 USCLASS NCLM: 424/401.000

BASIC ABSTRACT:

WO 2002015865 A2 UPAB: 20060119

NOVELTY - Polymers (I), obtained by free radical polymerization of (a) vinyl ester(s) (II) of 1-24 carbon (C) carboxylic acids in the presence of (b) polyether-containing compounds (III) with a molecular weight not less than 300 and (c) optionally other copolymerizable monomer(s) (IV) are used in skin cosmetic formulations and in decorative cosmetics.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for skin cosmetic formulations, emulsions, water/oil emulsions and oil/water emulsions containing (I).

USE - Polymers (I) are used in skin <u>cosmetic</u> formulations and in decorative <u>cosmetics</u>, especially skin <u>cosmetic</u> formulations, emulsions, water/oil emulsions and oil/water emulsions (all claimed).

ADVANTAGE - (I) are film-forming polymers meeting the requirements for cosmetics, i.e. are waterproof or water -resistant, minimize transfer to textiles and clothing, spread easily, bind moisture, feel pleasant on the skin and are not sticky. MANUAL CODE:

CPI: A04-F01A; A10-B01; A12-V04C; D08-B01; D08-B09A TECH

```
POLYMERS - Preferred Polymers: After polymerization, the ester functions
of monomer (II) are (partly) hydrolyzed. Suitable polyether-containing
compounds (III) include polyether alcohol, ether, ester or amide
compounds of formula (IIIA) or polyether-silicone derivatives, preferably
of formula (IIIB), especially of formula (IIIC):
R2-4 = a (substituted) alkylene group of the formula -(CH2)2-, -(CH2)3-,
-(CH2)4), -CH2-CH(R6)- or -CH2-CHOR7-CH2-;
R1, R5, R7 = hydrogen (H), 1-24, preferably 1-12 carbon (C) alkyl,
R6-C(=0) - or R6-NH-C(=0) -;
R6 = 1-24, preferably 1-12 C alkyl;
A = -C(=0) - 0, -C(=0) - B - C(=0) - 0 or -C(=0) - NH - B - NH - C(=0) - 0;
B = -(CH2)t- or arylene, optionally substituted;
n = 1-1000, preferably 1-8;
s = 0-1000, preferably 0;
t = 1-12;
u = 1-5000, preferably 2-2000;
v, w, x, y, z = 0-5000, preferably 0-2000;
R8 = identical or different groups selected from 1-20 C aliphatic
hydrocarbyl, 3-20 C cycloaliphatic hydrocarbyl, aromatic groups or R12;
R9 = CH3 \text{ or } -O-(CH2CH2-O)c-(CH2-CH(CH3)-O)d-R11;
R10 = CH3 \text{ or } R9;
R11 = H, CH3, -(Si(R8)2-O)a-Si(R8)2-CH3 or -(CO)e-R13;
R12 = -(CH2) f - O - (CH2 - CH2 - O) c - (CH2 - CH (CH3) - O) d - R11;
R13 = a 1-40 C organic group, optionally containing amino, carboxylic acid
or sulfonate groups or also an anion is e is 0;
a, b = integers such that the polysiloxane block has a molecular weight of
300-30000;
c, d = 0-50;
(c+d) = more than 0;
e = 0 \text{ or } 1;
f = 1-6.
In (IIIA) especially useful in skin cosmetic formulations,
R1, R5, R7 = hydrogen (H), 1-6 C alkyl, R6-C(=0) or R6-NH-C(=0);
n = 1;
s = 0;
u = 5-500;
v, s = 0-500.
Other suitable (III) are compounds obtained by reacting
polyethylene-imines, preferably of molecular weight 300-20000, with
alkylene oxide(s), preferably ethylene oxide, propylene oxide and/or
butylene oxide, especially ethylene oxide; and compounds obtained by
polymerization of ethylenically unsaturated monomers containing alkylene
oxide, especially polyalkylene oxide vinyl ethers or polyalkylene oxide
(meth)acrylates, and optionally comonomer(s). Comonomers (IV) are selected
from (meth)acrylic, maleic, fumaric and crotonic acid, maleic anhydride
and its half esters, (m)ethyl, n-, t- and iso-butyl, stearyl,
2-hydroxyethyl, hydroxypropyl and alkylene glycol
```

(meth)acrylate; 2-ethylhexyl acrylate; N-t-butyl- and N-octyl-acrylamide; styrene; unsaturated sulfonic acids, e.g. acrylamidopropane sulfonic acid; vinylpyrrolidone; vinylcaprolactam; vinyl ethers (e.g. (m)ethyl, butyl or dodecyl vinyl ether); vinylformamide; vinylmethylacetamide; vinyl amine; 1-vinylimidazole; 1-vinyl-2methylimidazole; N, N-dimethylaminomethyl methacrylate; N-(3-(dimethylamino)propyl)methacrylamide; 3-methyl-1-vinylimidazolium chloride or methylsulfate; N.N-dimethylaminoethyl methacrylate; and N-(3-(dimethylamino)propyl)methacrylamide quaternized with methyl chloride, methyl sulfate or diethyl sulfate. Polymers (I) comprise 10-90 wt.% (II), 2-90 wt.% (III) and 0-50 wt.% (IV); 50-97 wt.% (II), 3-50 wt.% (III) and 0-30 wt.% (IV); or 65-97 wt.% (II), 3-35 wt.% (III) and 0-20 wt.% (IV). Formulations: (all claimed) The skin cosmetics are: (a) formulations containing 0.05-20 wt.% (I), 20-99.95 wt.% water , solvent and/or oil component and 0-79.5 wt.% other constituents; (b) emulsions containing 0.05-10 wt.% (I), 10-94.94 wt.% water, 5-89.94 wt.% oil component, 0.01-40 wt.% emulsifier and 0-74.94 wt.% other; (c) water/oil emulsions containing 0.05-10 wt.% (I), 20-77.95 wt.% water, 20-77.95 wt.% oil component, 2-35 wt.% emulsifier and 0-55.95 wt.% other; and (d) oil/water emulsions containing 0.05-10 wt.% (I), 40-96.95 wt.% water, 1-44.95 wt.% oil component, 1-35 wt.% emulsifier, 0-10 wt.% gelling agent and 0-57.95 wt.% other.

ABEX EXAMPLE - 72 g polyethylene glycol 35000 were heated to 80degreesC under a nitrogen stream, with stirring, then 410 g vinyl acetate and a solution of 1.4 g tert.-butyl perpivalate in 30 g methanol were added in 3 hours. Stirring at 80degreesC was continued for 2 hours. After cooling, the polymer was dissolved in 450 ml methanol and hydrolyzed with 50 ml 10% methanolic sodium hydroxide solution at 30degreesC. After 40 minutes, reaction was stopped by adding 750 ml 1% acetic acid and the methanol was distilled off. The resultant polymer (IA) had a K value of 59 (1% in N-methylpyrrolidone) and was 96% hydrolyzed. A water/oil emulsion, control skin creme (A) contained 2.0 wt.% Cremophor A 6 (RTM; ceteareth-6 and stearyl alcohol), 2.0 wt.% Cremophor A 25 (RTM; ceteareth-25), 2.0 wt.% Lanette O (RTM; cetearyl alcohol), 3.0 wt.% Imwitor 960 K (RTM; glyceryl stearate SE), 5.0 wt.% paraffin oil, 4.0 wt.% jojoba oil, 3.0 wt.% Luvitol EHO (RTM; cetearyl octanoate), 1.0 wt.% Abil 350 (RTM; dimethicone), 3.0 wt.% Amerchol L 101 (RTM; mineral oil and lanolin alcohol), 0.5 wt.% Veegum Ultra (RTM; magnesium aluminum silicate), 5.0 wt.% 1,2-propylene glycol, 0.3 wt.% Abiol (RTM; imidazolindinyl-urea), 0.5 wt.% phenoxyethanol, 1.0 wt.% D-panthenol USP and water to 100 wt.%. Skin creme (B) also contained 0.5 wt.% polymer (IA). 100 mul emulsion were spread evenly on the back of the hands of 10 testers, one on each hand, and the feel was assessed after 30 minutes. (B) was rated much softer than (A) by 5 testers and softer by 4 testers, whilst 1 tester gave (A) and (B) the same rating.

L271 ANSWER 36 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-443828 [47] WPIX

DOC. NO. CPI: C2002-126235 [47]

TITLE: New polymers of vinyl carboxylate with

polyether-silicone, reaction product of

polyethylene-imine with alkylene oxide or ethylenically unsaturated polyether (co)polymer and similar polymers

are used in hair cosmetics

DERWENT CLASS: A14; A25; A26; A96; D21

GOTSCHE M; WOOD C INVENTOR:

PATENT ASSIGNEE: (BADI-C) BASF AG; (GOTS-I) GOTSCHE M; (WOOD-I) WOOD C

COUNTRY COUNT: 95

PATENT INFORMATION:

TENT NO	KINI	DATE	WEEK	LA	PG	MAIN IPC	
2002015853	A1	20020228	(200247)*	DE	52[0]		<
2001084020	Α	20020304	(200247)	EN			<
10041163	A1	20020307	(200247)	DE			<
1313431	A1	20030528	(200336)	DE			
20030180245	A1	20030925	(200364)	EN			
1447678	A	20031008	(200403)	ZH			
2004506668	M	20040304	(200417)	JA	88		
1189152	С	20050216	(200622)	ZH			
1313431	В1	20060315	(200622)	DE			
50109228	G	20060511	(200632)	DE			
2260272	Т3	20061101	(200673)	ES			
	2002015853 2001084020 10041163 1313431 20030180245 1447678 2004506668 1189152 1313431 50109228 2260272	2002015853 A1 2001084020 A 10041163 A1 1313431 A1 20030180245 A1 1447678 A 2004506668 W 1189152 C 1313431 B1 50109228 G	2002015853 A1 20020228 2001084020 A 20020304 10041163 A1 20020307 1313431 A1 20030528 20030180245 A1 20030925 1447678 A 20031008 2004506668 W 20040304 1189152 C 20050216 1313431 B1 20060315 50109228 G 20060511	2002015853 A1 20020228 (200247)* 2001084020 A 20020304 (200247) 10041163 A1 20020307 (200247) 1313431 A1 20030528 (200336) 20030180245 A1 20030925 (200364) 1447678 A 20031008 (200403) 2004506668 W 20040304 (200417) 1189152 C 20050216 (200622) 1313431 B1 20060315 (200622) 50109228 G 20060511 (200632)	2002015853 A1 20020228 (200247)* DE 2001084020 A 20020304 (200247) EN 10041163 A1 20030528 (200336) DE 20030180245 A1 20030925 (200364) EN 1447678 A 20031008 (200403) ZH 2004506668 W 20040304 (200417) JA 1189152 C 20050216 (200622) ZH 1313431 B1 20060315 (200622) DE 50109228 G 20060511 (200632) DE	2002015853 A1 20020228 (200247)* DE 52[0] 2001084020 A 20020304 (200247) EN 10041163 A1 20020307 (200247) DE 1313431 A1 20030528 (200336) DE 20030180245 A1 20030925 (200364) EN 1447678 A 20031008 (200403) ZH 2004506668 W 20040304 (200417) JA 88 1189152 C 20050216 (200622) ZH 1313431 B1 20060315 (200622) DE 50109228 G 20060511 (200632) DE	2002015853 A1 20020228 (200247) * DE 52[0] 2001084020 A 20020304 (200247) EN 10041163 A1 20020307 (200247) DE 1313431 A1 20030528 (200336) DE 20030180245 A1 20030925 (200364) EN 1447678 A 20031008 (200403) ZH 2004506668 W 20040304 (200417) JA 88 1189152 C 20050216 (200622) ZH 1313431 B1 20060315 (200622) DE 50109228 G 20060511 (200632) DE

APPLICATION DETAILS:

PATE	INT NO	KIND	APPLICATION	DATE
WO 2	2002015853	 A1	WO 2001-EP9437	20010816
DE 1	.0041163 A1		DE 2000-100411	63 20000821
AU 2	2001084020	A	AU 2001-84020	20010816
CN 1	.447678 A		CN 2001-814515	20010816
CN 1	.189152 C		CN 2001-814515	20010816
DE 5	0109228 G		DE 2001-509228	20010816
EP 1	.313431 A1		EP 2001-962950	20010816
EP 1	.313431 B1		EP 2001-962950	20010816
DE 5	0109228 G		EP 2001-962950	20010816
EP 1	.313431 A1		WO 2001-EP9437	20010816
US 2	0030180245	A1	WO 2001-EP9437	20010816
JP 2	004506668	W	WO 2001-EP9437	20010816
EP 1	.313431 B1		WO 2001-EP9437	20010816
DE 5	0109228 G		WO 2001-EP9437	20010816
JP 2	004506668	W	JP 2002-520765	20010816
US 2	0030180245	A1	US 2003-344538	20030212
ES 2	2260272 T3		EP 2001-962950	20010816

FILING DETAILS:

PAI	CENT NO	KIND			PAT	CENT NO	
DE	50109228	G	Based	on	ΕP	1313431	Α
AU	2001084020	A	Based	on	WO	2002015853	Α
EP	1313431	A1	Based	on	WO	2002015853	Α
JΡ	2004506668	W	Based	on	WO	2002015853	Α
ΕP	1313431	B1	Based	on	WO	2002015853	Α
DE	50109228	G	Based	on	WO	2002015853	Α
ES	2260272	T3	Based	on	EΡ	1313431	Α

PRIORITY APPLN. INFO: <u>DE 2000-10041163</u> 20000821

INT. PATENT CLASSIF.:

MAIN: A61K007-06 SECONDARY: A61K007-075

IPC ORIGINAL: A61K0008-72 [I,C]; A61K0008-72 [I,C];
A61K0008-91 [I,A]; A61K0008-91 [I,A];

<u>A6100005-00</u> [I,A]; <u>A6100005-00</u> [I,A]; <u>A6100005-00</u> [I,A];

A6100005-00 [I,C]; C08F0283-00 [I,C]; C08F0283-00

[I,C]; C08F0283-06 [I,A]; C08F0283-06 [I,A]; C08F0283-12 [I,A]; C08F0283-12 [I,A]; C08F0290-00 [I,C]; C08F0290-00

[I,C]; C08F0290-14 [I,A]; C08F0290-14 [I,A]

```
IPC RECLASSIF.:
                      A61K0008-00 [I,A]; A61K0008-00 [I,C];
                      A61K0008-72 [I,C]; A61K0008-86 [I,A];
                      A61K0008-89 [I,A]; A61Q0005-00 [I,A];
                      A6100005-00 [I,C]; A6100005-02 [I,A];
                      A61Q0005-02 [I,C]; C08F0283-00 [I,C]; C08F0283-06
                       [I,A]; C08F0283-12 [I,A]; C08F0287-00 [I,A]; C08F0287-00
                       [I,C]; C08F0290-00 [I,C]; C08F0290-14 [I,A]
                      A61K0008-91; A61Q0005-02; A61Q0005-06; A61Q0019-10;
ECLA:
                      C08F0283-06+218/04; C08F0283-12+218/04; C08F0290-14B
USCLASS NCLM:
                      424/070.160
                      424/070.150; 424/070.170
       NCLS:
BASIC ABSTRACT:
           WO 2002015853 A1
                             UPAB: 20060119
            NOVELTY - Polymers obtained by free radical polymerization of (a) vinyl
     ester(s) (II) of 1-24 carbon (C) carboxylic acids in the presence of (b.1)
     silicone derivatives containing polyether, (b.2) compounds containing
     polyether obtained by reacting polyethylene-imines with alkylene oxides or
     (b.3) homo- and copolymers of ethylenically unsaturated compounds containing
     polyether and (c) optionally other copolymerizable monomer(s) (IV) are new.
            DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for (a)
     crosslinked polymers obtained by free radical polymerization of (II),
     polyether-containing compounds (III) and optionally (IV), in which the
     crosslinker is added during or after polymerization; (b) the use of polymers
     (I), obtained by free radical polymerization of (a) (II) of 1-24 carbon (C)
     carboxylic acids in the presence of (b) (III) with a molecular weight not less
     than 300 and (c) optionally (IV), in hair cosmetic formulations; (c) hair
     cosmetic formulations containing (I).
            USE - Polymers (I) are used in hair cosmetic formulations (claimed),
     preferably in hair styling formulations, especially aerosol and pump sprays
     and aerosol and pump mousses.
             ADVANTAGE - (I) are film-forming polymers that give a firm hold and
qive the hair high elasticity. MANUAL CODE: CPI: A05-H01B; A05-J07; A06-
A00E3; A10-E01; A12-V04A;
                      D08-B05
TECH
     POLYMERS - Preferred Polymers: Suitable polyether-containing compounds
     (III) include polyether <u>alcohol</u>, ether, ester or amide compounds
     of formula (IIIA) or polyether-silicone derivatives, preferably of formula
     (IIIB), especially of formula (IIIC):
     R2-4 = a (substituted) alkylene group of the formula -(CH2)2-, -(CH2)3-,
     -(CH2)4), -CH2-CH(R6)- or -CH2-CHOR7-CH2-;
     R1, R5, R7 = hydrogen (H), 1-24, preferably 1-12, especially 1-6 carbon
     (C) alkvl, R6-C(=0) or R6-NH-C(=0)-;
     R6 = 1-24, preferably 1-12, especially 1-6 C alkyl;
     A = -C(=0) - 0, -C(=0) - B - C(=0) - 0 or -C(=0) - NH - B - NH - C(=0) - 0;
     B = -(CH2)t- or arylene, optionally substituted;
     n = 1-1000, preferably 1-8, especially 1;
     s = 0-1000, preferably 0;
     t = 1-12;
     u = 1-5000, preferably 2-2000, especially 5-500;
     v, w, x, y, z = 0-5000, preferably 0-2000, especially 0-500;
     R8 = identical or different groups selected from 1-20 C aliphatic
     hydrocarbyl, 3-20 C cycloaliphatic hydrocarbyl, aromatic groups or R12;
     R9 = CH3 \text{ or } -O-(CH2CH2-O)c-(CH2-CH(CH3)-O)d-R11;
     R10 = CH3 \text{ or } R9;
     R11 = H, CH3, -(Si(R8)2-O)a-Si(R8)2-CH3 or -(CO)e-R13;
     R12 = -(CH2) f - O - (CH2 - CH2 - O) c - (CH2 - CH(CH3) - O) d - R11;
     R13 = a 1-40 C organic group, optionally containing amino, carboxylic acid
     or sulfonate groups or also an anion is e is 0;
```

```
a, b = integers such that the polysiloxane block has a molecular weight of
     300-30000;
     c, d = 0-50;
     (c+d) = more than 0;
     e = 0 \text{ or } 1;
     f = 1-6.
     Other suitable (III) are compounds obtained by reacting
     polyethylene-imines, preferably of molecular weight 300-20000, with
     alkylene oxide(s), preferably ethylene oxide, propylene oxide and/or
     butylene oxide, especially ethylene oxide; and compounds obtained by
     polymerization of ethylenically unsaturated monomers containing alkylene
     oxide, especially polyalkylene oxide vinyl ethers or polyalkylene oxide
     (meth)acrylates, and optionally comonomer(s). Comonomers (IV) are selected
     from (meth)acrylic, maleic, fumaric and crotonic acid, maleic anhydride
     and its half esters, (m)ethyl, n-, t- and iso-butyl, stearyl,
     2-hydroxyethyl, hydroxypropyl and alkylene glycol
     (meth)acrylate; 2-ethylhexyl acrylate; N-t-butyl- and
     N-octyl-acrylamide; styrene; unsaturated sulfonic acids, e.g.
     acrylamidopropanesulfonic acid; vinylpyrrolidone; vinylcaprolactam; vinyl
     ethers (e.g. (m)ethyl, butyl or dodecyl vinyl ether); vinylformamide;
     vinylmethylacetamide; vinyl amine; 1-vinylimidazole; 1-vinyl-2-
     methylimidazole; N,N-dimethylaminomethyl methacrylate;
     N-(3-(dimethylamino)propyl)methacrylamide; 3-methyl-1-vinylimidazolium
     chloride or methylsulfate; N,N-dimethylaminoethyl methacrylate; and
     N-(3-(dimethylamino)propyl)methacrylamide quaternized with methyl
     chloride, methyl sulfate or diethyl sulfate. Polymers (I) comprise 10-90
     wt.% (II), 2-90 wt.% (III) and 0-50 wt.% (IV); 50-97 wt.% (II), 3-50 wt.%
     (III) and 0-30 wt.% (IV); or 65-97 wt.% (II), 3-35 wt.% (III) and 0-20
     wt.% (IV). Formulations: (all claimed) The hair cosmetics are
     formulations containing: (a) 0.05-20 wt.% (I), 20-99.95 wt.% water
     and/or alcohol and 0-79.05 wt.% other constituents; (b) 0.1-10
     wt.% (I), 20-99.9 wt.% water and/or alcohol, 0-70 wt.%
     propellant and 0-20 wt.% other; (c) 0.1-10 wt.% (I), 55-94.8 wt.%
     water and/or alcohol, 5-20 wt.% propellant, 0.1-5 wt.%
     emulsifier and 0-10 wt.% other; (d) 0.1-10 wt.% (I), 60-99.85 wt.%
     water and/or alcohol, 0.05-10 wt.% gelling agent and
     0-57.95 20 wt.% other; and (e) 0.05-10 wt.% (I), 25-94.95 wt.%
     water, 5-50 wt.% surfactant, 0-5 wt.% other conditioner and 0-10
     wt.% other cosmetic constituents.
ABEX EXAMPLE - 273 g polyethylene glycol 6000 were heated to 80degreesC under
     a nitrogen stream, with stirring, then 410 g vinyl acetate and a solution
     of 1.4 \text{ g} tert.-butyl perpivalate in 30 g methanol were added in 3 hours.
     Stirring at 80degreesC was continued for 2 hours. After cooling, the
     polymer was dissolved in 450 ml methanol and subjected to solvent exchange
     by steam distillation, giving an aqueous solution or dispersion. The
     polymer (IA) had a K value of 47. Aerosol hair mousse contained 2.0 wt.%
     (A) Luviquat Hold (RTM; polyquaternium-46) (control) or (B) (IA), together
     with 2.00 wt.% Luviquat Mono LS (RTM; coco trimonium methyl sulfate), 67.7
     wt.% water, 10.0 wt.% propane/butane (3.5 bar at 20degreesC) and perfume
     oil as required. The properties of the mousse were determined on scales
     from 1 = \text{very good to } 3 = \text{poor.} The ratings were foaming, consistency and
     spreading were (A, B) 1; for feel on wet hair and feel of dry hair(A) 2,
     (B) 1-; wet combing property (A) 2+, (B) 1-; hold (A) 1, (B) 2+; dry
     combing (A) 2, (B) 2+; stickiness (A) 1-, (B) 1; and elasticity of hair
     (A) 2-, (B) 1.
L271 ANSWER 37 OF 84 WPIX COPYRIGHT 2008
                                                THE THOMSON CORP on STN
ACCESSION NUMBER:
                     2002-339145 [37]
                                         WPIX
DOC. NO. CPI:
                     C2002-097319 [37]
```

Cosmetic composition for use in hair styling,

TITLE:

comprises at least one block copolymer consisting of at least two polymer blocks having differing refraction

indices

DERWENT CLASS: A18; A96; D21

INVENTOR: DAUGA C; MOUGIN N; SAMAIN H

PATENT ASSIGNEE: (DAUG-I) DAUGA C; (OREA-C) L'OREAL SA; (MOUG-I) MOUGIN N;

(SAMA-I) SAMAIN H

COUNTRY COUNT: 95

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 2002005765	A1 2002012	24 (200237)*	FR	13[0]	<	
FR 2811885	A1 2002012	25 (200237)	FR		<	
AU 2001077574	A 2002013	30 (200241)	EN		<	
EP 1301161	A1 2003041	6 (200328)	FR			
JP 2004503576	W 2004020)5 (200412)	JA	27		
US 20040052752	A1 2004031	8 (200421)	ΕN			

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
WO 2002005765 A1	WO 2001-FR2244 20010711
FR 2811885 A1	FR 2000-9405 20000718
AU 2001077574 A	AU 2001-77574 20010711
EP 1301161 A1	EP 2001-955403 20010711
EP 1301161 A1	WO 2001-FR2244 20010711
JP 2004503576 W	WO 2001-FR2244 20010711
US 20040052752 A1	WO 2001-FR2244 20010711
JP 2004503576 W	JP 2002-511699 20010711
US 20040052752 A1	US 2003-333228 20030828

FILING DETAILS:

PATENT NO	KIND		PAT	ENT NO)		
AU 2001077574 A EP 1301161 A1 JP 2004503576 W	Based	on	WO	200200)5765 A)5765 A)5765 A		
PRIORITY APPLN. INFO: INT. PATENT CLASSIF.:	FR 2000-9405		2000	0718			
MAIN:	A61K007-00						
SECONDARY:	A61K007-06;	A61K007	7-11				
<pre>IPC RECLASSIF.:</pre>	A61K0008-00	[I,A];	A61K00	08-00	[I,C];		
	A61K0008-04	[I,A];	A61K00	08-04	[I,C];		
	A61K0008-30	[I,A];	A61K00	08-30	[I,C];		
	A61K0008-37	[I,A];	A61K00	08-49	[I,A];		
	A61K0008-72	[I,A];	A61K00	08-72	[I,C];		
	A61K0008-81	[I,A];	A61K00	08-90	[I,A];		
	A61Q0005-00		A61000	05-00	[I,C];		
	A61Q0005-02						
	A61Q0005-06		***************************************				
			***************************************			C08F0297-00	[I,C];
						C08L0053-00	
ECLA:	A61K0008-90;	A61Q00	05-00;	C08F0)293-00	B; C08L0053-0	00
USCLASS NCLM:	424/070.160		,			•	
BASIC ABSTRACT:							

WO 2002005765 A1 UPAB: 20050525

NOVELTY - Cosmetic composition comprises, in cosmetically acceptable medium, at least one block copolymer consisting of at least two polymeric blocks A and B, with each of blocks A having refraction index higher or lower by at least 0.1 than the refraction index or indices of adjoining polymeric block(s) B.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) process of treatment of hair, comprising application of at least one composition as claimed;
- (2) process of styling of hair, comprising spraying at least one composition as claimed onto hair, leaving to act and dry, and style the hair as desired; and
- (3) use of composition as claimed as hair styling product. USE - As hair-styling composition. MANUAL CODE: CPI: A09-A02; A12-V04A; D08-B05 TECH

POLYMERS - Preferred Compound: Block copolymer contains at least 2 (preferably 2 or 3) polymeric blocks and is preferably polystyrene/poly (ethyl 2-perfluorooctyl acrylate), and has average molecular wt., measured by light diffusion, equal 10000-500000 g/mol, preferably 20000-200000 g/mol. Block copolymer is soluble or dispersible in cosmetically acceptable medium.

Preparation: Polymeric sequences are prepared from monomers selected from (meth)acrylic acid, N,N-dimethylacrylamide, optionally quaternized dimethyl aminomethyl methacrylate, (meth)acrylamide, N-tbutylacrylamide, maleic acid, its semi-esters and anhydride, crotonic and itaconic acid, hydroxylated (meth)acrylates such as hydroxyethyl methacrylate, diallyl dimethylammonium chloride, vinyl pyrrolidone, pyridine or imidazole, vinyl ethers, other heterocyclic polar vinyl compounds, styrene sulfonates, allyl or vinyl alcohols, salts of above acids or amines, esters of 1-18C alcohols and (meth)acrylic acid, fluorinated acrylates, styrene, polystyrene, vinyl acetate or chloride, vinylidene chloride, vinyl propionate, alpha-methyl styrene, t-butyl styrene, butadiene, cyclohexadiene, ethylene, propylene, vinyl toluene and their mixtures. Preferred Composition: Cosmetic composition contains 0.001-10 wt.% of block copolymer per its total wt., in cosmetically acceptable medium comprising water or organic solvents. ORGANIC CHEMISTRY - Preferred Solvents: Organic solvents are selected from hydrophilic, amphiphilic, and lipophilic solvents and their mixtures. Hydrophilic solvents are selected from 1-8C linear or branched lower alcohols, acetone, polyethylene glycols with 6-80 ethylene-oxy groups, polyols, mono- or di-alkyl isosorbides with 1-5C alkyl groups, and glycol ethers. Amphiphilic solvents are selected from derivatives of polypropylene glycol (PPG) such as esters of PPG and fatty acids or fatty alcohols. Lipophilic solvents are selected from hydrocarbons and esters of mono- or polycarboxylic acids.

Preferred Product: The composition is preferably a hair styling product, allowing to shape and set hair as required, and maintain the obtained hairstyle.

L271 ANSWER 38 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-139388 [18] WPIX CROSS REFERENCE: 2002-139389; 2002-655442 DOC. NO. CPI:

Polymer formulation as binder compositions for disposable TITLE:

items, e.g. wet wipes, comprises salt-sensitive binder

and co-binder

C2002-042819 [18]

A18; A96; D22; F07; P32; P73 DERWENT CLASS:

INVENTOR: BRANHAM K D; CHANG Y; CHEN F M; CHEN F M C; JACKSON D M;

JOHNSON E D; LANG F J; LINDSAY J D; MUMICK P S; POMPLUN W S; SCHICK K G; SCHULTZ W T; SOERENS D A; SUN T; WANG K Y

PATENT ASSIGNEE: (KIMB-C) KIMBERLY-CLARK WORLDWIDE INC

COUNTRY COUNT: 93

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
WO 2001083866	A2 20011108	(200218)*	EN	122[3]	
AU 2001061130	A 20011112	(200222)	ΕN		
EP 1280860	A2 20030205	(200310)	ΕN		
KR 2002091265	A 20021205	(200324)	KO		
KR 2003004384	A 20030114	(200333)	KO		
US 6599848	B1 20030729	(200354)	ΕN		
JP 2003531955	W 20031028	(200373)	JA	144	
CN 1440444	A 20030903	(200380)	ZH		
MX 2002010574	A1 20030301	(200413)	ES		
ZA 2002008490	A 20040128	(200420)	ΕN	122	
BR 2001010583	A 20040622	(200442)	PΤ		
ZA 2002008489	A 20040728	(200466)	ΕN	133	
US 6815502	B1 20041109	(200474)	ΕN		
CN 1318670	C 20070530	(200761)	ZH		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
WO 2001083866	A2	WO 2001-US14178 20010503
US 6599848 B1		US 2000-564837 20000504
US 6815502 B1		US 2000-565125 20000504
AU 2001061130	A	AU 2001-61130 20010503
BR 2001010583	A	BR 2001-10583 20010503
CN 1440444 A		CN 2001-812278 20010503
EP 1280860 A2		EP 2001-934995 20010503
JP 2003531955	W	JP 2001-580470 20010503
EP 1280860 A2		WO 2001-US14178 20010503
JP 2003531955	W	WO 2001-US14178 20010503
MX 2002010574	A1	WO 2001-US14178 20010503
BR 2001010583	A	WO 2001-US14178 20010503
ZA 2002008489	A	ZA 2002-8489 20021021
ZA 2002008490	A	ZA 2002-8490 20021021
MX 2002010574	A1	MX 2002-10574 20021025
KR 2002091265	A	KR 2002-714722 20021102
KR 2003004384	A	KR 2002-714723 20021102
CN 1318670 C		CN 2001-812273 20010503

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001061130 A EP 1280860 A2 JP 2003531955 W MX 2002010574 A1 BR 2001010583 A	Based on Based on Based on Based on Based on Based on	WO 2001083866 A
RIORITY APPLN. INFO:	20000	20000504

PRIORITY APPLN. INFO: US 2000-564837 20000504 US 2000-565125 20000504

<u>US</u>	2000-564212	20000504
US	2000-564424	20000504

INT. PATENT CLASSIF.:

MAIN: C08F020-06; C08F257-02; D04H001-64 IPC ORIGINAL: D04H0001-64 [I,A]; D04H0001-64 [I,C]

IPC RECLASSIF.: A61F0013-00 [I,A]; A61F0013-00 [I,C]; A61F0013-15 [I,A];

A61F0013-15 [I,A]; A61F0013-15 [I,C]; A61F0013-15 [I,C]; A61F0013-49 [I,A]; A61F0013-53 [I,A]; A61F0013-551 [I,A]; A61F0005-44 [I,A]; A61F0005-44 [I,C]; C08F0020-00 [I,C]; C08F0020-06 [I,A]; C08L0101-00 [I,C]; C08L0101-02 [I,A]; C08L0023-00 [N,C]; C08L0023-08 [N,A];

C08L0033-00 [I,C]; C08L0033-02 [I,A]; C08L0033-08 [I,A]; D04H0001-58 [I,A]; D04H0001-58 [I,C]; D04H0001-64 [I,A];

D04H0001-64 [I,C]

ECLA: C08L0033-08+B; C08L0033-08+B2; C08L0101-02+B2;

D04H0001-64A M08L0023:08

ICO: M08L0023:08 USCLASS NCLM: 442/059.000

NCLS: 015/209.100; 015/210.100; 428/913.000; 442/154.000;

442/155.000; 442/164.000; 442/327.000

BASIC ABSTRACT:

WO 2001083866 A2 UPAB: 20060118

NOVELTY - A polymer formulation comprises a salt-sensitive binder and a co-binder. It is dispersible in hard or soft water and has a wet strength in a neutral salt solution containing at least1 weight% salt. The salt comprises monovalent ions.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for (A) a binder composition for binding fibrous material into an integral web, comprising the ion-sensitive polymer as above; (B) a non-woven fabric comprising fibrous material, and a binder material comprising the ionsensitive polymer formulation as above; (C) a method of making an ionsensitive polymer formulation comprising combining an acrylic acid terpolymer and a non-crosslinking poly(ethylene-vinyl acetate), where the polymer formulation is insoluble in a neutral salt solution containing at least0.3 weight% salt, the salt comprising monovalent ions; and the polymer is soluble in water containing less than 10 ppm of multivalent ions; (D) a fibrous substrate comprising fibrous material and a binder composition as above for binding the fibrous material into an integral web; (E) a water-dispersible article comprising the fibrous substrate above; and (F) a method of making a fibrous substrate comprising applying to a fibrous material a binder composition in a foam or liquid form as above for binding the fibrous material into an integral web.

USE - As binder compositions for disposable items, e.g. wet wipes. ADVANTAGE - The inventive polymer formulation is ion-sensitive and water-dispersible. This formulation produces products at a reasonable cost without compromising product safety and environmental concerns. The products produced are stable during storage and retain a desired level of wet strength during use and are wetted with a wetting composition that is free of organic solvents. MANUAL CODE: CPI: A12-V03C1; A12-V04; D09-C; F04-E; F04-E04
TECH

POLYMERS - Preferred Condition: The polymer formulation is ion-sensitive. It is insoluble in <u>water</u> when the <u>water</u> does not contain a sufficient amount of a first salt. It is soluble in <u>water</u> when the <u>water</u> contains a solubilizing amount of a second salt that is different from the first salt. It is soluble in <u>water</u> containing less than 10, preferably 200 ppm of <u>calcium</u> and magnesium in a 2:1 ratio. It is insoluble in a salt solution containing 1-5, preferably 4 wt.% salt. It is also insoluble in a salt solution over a pH of 3-8, preferably 5. The salt solution has a pH of 3.5-7, preferably 4.2-6.1. The type and amount of the co-binder is such

that makes the polymer formulation sprayable. The co-binder polymer has a molecular weight of 500000-200000000. It has a Tg that is less than the Tg of the ion-sensitive polymer. The polymer formulation is ion-sensitive. It is insoluble in a neutral salt solution containing at least1, preferably 1-3.0 wt.% salt comprising monovalent ions. It is soluble in water containing at most200, preferably less than 10 ppm of multivalent ions. Preferred Component: The copolymer is a terpolymer. It is prepared by sulfonation of a polymer having a molecular weight above 100000 or from monomers comprising sulfonate-containing monomer. The salt-sensitive binder is an ion-sensitive polymer. The co-binder is a co-binder polymer which is non-crosslinking, not water-soluble, and in the form of an emulsion. The co-binder is preferably a latex which is 50%, preferably 20% crosslinked. The latex is prepared without the addition of a crosslinker, non-crosslinking, or dried without substantial crosslinking. Preferred Polymer: The ion-sensitive polymer is a terpolymer made from monomers capable of free radical polymerization into a terpolymer; or an acrylic acid terpolymer. The terpolymer comprises acrylic acid, methacrylic acid or a combination of alkyl acrylates, preferably acrylic acid, butyl acrylate and 2-ethylhexyl acrylate. The co-binder polymer comprises non-crosslinking poly(ethylene-vinyl acetate), non-crosslinking poly(styrene-butadiene), or non-crosslinking poly(styrene-acrylic), preferably non-crosslinking poly(ethylene-vinyl acetate) . Preferred Composition: The polymer composition comprises an ion-sensitive polymer (65-75 or 55-99 wt.%) and a co-binder (25-35 or 1-45 wt.%). The ion-sensitive polymer comprises a sulfonate anion modified acrylic acid terpolymer formed from acrylic acid (35-less than 80, preferably 57-66 mol%); 2-acrylamido-2-methyl-1propanesulfonic acid (0-20, preferably 1-6 mol%) and their alkali earth metal and organic amine salts; butyl acrylate (0-65, preferably 15-28 mol%); and 2-ethylhexyl acrylate (0-45, preferably 7-13 mol%). The acrylic acid terpolymer comprises (mol%) acrylic acid (35-80, preferably 57-66), butyl acrylate (0-65, preferably 15-28) and 2-ethylhexyl acrylate (0-45, preferably 7-13). ORGANIC CHEMISTRY - Preferred Component: The monomers are acrylic acid monomers or alkyl acrylate monomers. The alkyl acrylate monomers are 1-18Cor 3-18 C cycloalkyl acrylic esters or methacrylic esters. The acrylic ester monomers comprise acrylamide or methacrylamide-based monomers. Preferred Compound: The acrylic acid monomers are acrylic acid or methacrylic acid. The acrylic ester monomers comprise acrylamide, N,N-dimethyl acrylamide, N-ethyl acrylamide, N-isopropyl acrylamide or hydroxymethyl acrylamide; N-vinylpyrrolidinone; N-vinylformamide; hydroxyalkyl acrylates, preferably hydroxyethyl acrylate; or hydroxyalkyl methacrylates, preferably hydroexyethyl mathacrylate. The sulfonate-containing monomer comprises acrylamido propanesulfonic acid; 2-methyl-2-propene sulfonic acid; vinyl sulfonic acid; styrene sulfonic acid; 2-sulfopropyl methacrylate; or sulfopropyl acrylate and its organic or inorganic salts. INORGANIC CHEMISTRY - Preferred Component: The multivalent ions comprise calcium, magnesium and/or zinc ions. The monovalent ions comprise sodium, lithium, potassium, and/or ammonium ions (preferably sodium). TEXTILES AND PAPER - Preferred Component: The fibrous material comprises layers of a woven fabric, a nonwoven fabric and/or a knitted fabric (preferably layers of nonwoven fabric). Preferred Property: The fibrous material comprises fibers having a length of at most15 mm. Preferred Material: The fibrous material comprises natural fibers and/or synthetic fibers. It contains fibers comprising cotton, linen, jute, hemp, wool, wood pulp, viscose rayon, cuprammonium rayon, cellulose acetate, polyester, polyamide and/or polyacrylic (preferably wood pulp). Preferred Method: When the binder composition is in a liquid form, the binder composition is applied to the fibrous material by spray, foam application,

immersion of the fibrous material in a bath of binder composition, curtain coating, passage of the fibrous material through a flooded nip, contact with a pre metered wetted roll coated with the binder composition, pressing the fibrous material against a deformable carrier containing the binder composition and printing.

ABEX EXAMPLE - An ion-sensitive polymer formulation was prepared using modified terpolymer (85%) comprising sodium 2-acrylamido-2-methyl-1-propanesulfonic acid (3.5%); acrylic acid (63.5%); butyl acrylate (22.5%) and 2-ethylhexyl acrylate (10.5%); and ethylene vinyl acetate (15%). The solubility results for 10, 50, 100, and 200 ppm were 100, 100, 98 and 91, respectively.

L271 ANSWER 39 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2001-549844 [61] WPIX

DOC. NO. CPI: C2001-163607 [61]

TITLE: Cosmetic composition, e.g. nail varnish, mascara or lipstick containing aqueous

dispersion of multiphase polymer particles as film-former, giving abrasion-resistant film in the

absence of organic solvents

DERWENT CLASS: A18; A25; A96; D21; G02

INVENTOR: BIVER C; DOMINGUES DOS SANTOS F; DRUJON X; LEIBLER L

PATENT ASSIGNEE: (AQOR-C) ATOFINA

COUNTRY COUNT: 93

PATENT INFORMATION:

PAI	CENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC	
WO	2001051018	A2	20010719	(200161)*	FR	24[0]		<
FR	2803743	A1	20010720	(200161)	FR			<
AU	2001026867	Α	20010724	(200166)	EN			<
EΡ	1246599	A2	20021009	(200267)	FR			<

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
WO 2001051018 A2	WO 2000-FR3588 20001219
FR 2803743 A1	FR 2000-463 20000114
EP 1246599 A2	EP 2000-990062 20001219
EP 1246599 A2	WO 2000-FR3588 20001219
AU 2001026867 A	AU 2001-26867 20001219

FILING DETAILS:

PATENT	NO	KIND			PAI	ENT	NO	
AU 2001	1026867 <i>P</i>	7	Based	on	WO	2001	051018	A
EP 1246	6599 A2		Based	on	WO	2001	051018	A

PRIORITY APPLN. INFO: FR 2000-463 20000114

INT. PATENT CLASSIF.:

IPC RECLASSIF.: A61K0008-04 [I,A]; A61K0008-04 [I,C];

A61K0008-72 [I,C]; A61K0008-81 [I,A]; A61Q0003-02 [I,A]; A61Q0003-02 [I,C]

ECLA: A61K0008-04C; A61K0008-04H; A61K0008-81K4; A61Q0003-02

ICO: K61K0201:21

BASIC ABSTRACT:

WO 2001051018 A2 UPAB: 20050526

NOVELTY - A <u>cosmetic</u> composition (A) contains 10-95 weight % of an <u>aqueous</u> dispersion of multiphase polymer particles comprising at least two separate phases, i.e. (a) a first internal phase formed from a soft polymer (P1) having a glass transition temperature (Tg1) below 20degreesC and (b) a second external phase formed by a hard polymer (P2) having a glass transition temperature (Tg2) above 40 degreesC.

USE - The polymer dispersions are useful as film formers. The use of (A) is claimed in a <u>colored</u> or <u>colorless</u> nail varnish, a varnish base, a base for nail care, a <u>make-up</u> product, a skin care or <u>bygiene</u> composition or a hair washing, care, conditioning, holding or styling composition. The claims also cover (A)-containing <u>make-up</u> products for coating the nails, eyelashes, eyebrows or lips; and films obtained by applying and drying (A) (specifically where the films have a modulus of elasticity of more than 60 MPa and a strain at the elastic limit of more than 2.5 MPa). (A) are typically used in nail-varnishes, mascaras or lipsticks, in combination with other conventional components such as antifoams, wetting agents, thickeners, <u>colorants</u>, fillers and perfumes.

ADVANTAGE - The <u>aqueous</u> polymer particle dispersions dry rapidly at room temperature, in the absence of (potentially inflammable or toxic) plasticizers or organic solvents, to give homogeneous, bright, non-sticky, abrasion-resistant films. The films are easily removable with conventional solvents such as acetone.

MANUAL CODE: CPI: A07-B02; A07-B03; A12-V04A; A12-V04C; D08-B; G02-A05

TECH

POLYMERS - Preferred Composition: Tq1 is below 5degreesC and Tq2 is above 40degreesC. The particles contain 70-90 wt. % P1 and 10-30 wt. % P2. P1 is more hydrophobic than P2. P1 and P2 comprise (i) 90-100 wt. % units derived from one or more of 1-16C alkyl (meth)acrylates (e.g. methyl, ethyl or butyl (meth)acrylate), hydroxyalkyl (meth)acrylates, vinyl carboxylate esters (e.g. vinyl acetate or stearate), styrene, alkylstyrenes (e.g. methylstyrene), haloalkyl styrenes (e.g. chloromethyl styrene), (meth)acrylamide, vinyl chloride, (meth)acrylic acid (or derivatives such as anhydrides), acidic or basic monomers (e.g. itaconic or maleic acid), silylated (meth)acrylic or vinyl monomers (e.g. methacryloyloxypropyl triethoxy (or tripropoxy) silane) and/or acetoacetoxy monomers (e.g. acetoacetoxyethyl (meth)acrylate); and (ii) 0-10 wt. % units derived from one or more of mono- or dicarboxylic acid allyl esters (e.g. allyl (meth)acrylate or diallyl phthalate or maleate), conjugated dienes (e.g. butadiene or isoprene), polyol (meth)acrylates (e.g. mono- or triethylene glycol dimethacrylate, 1,3- or 1,4-butylene glycol dimethacrylate, 1,4-butanediol diacrylate, pentaerythritol tetraacrylate or trimethylolpropane triacrylate), polyvinyl benzene (e.g. divinyl benzene) or polyallyl compounds (e.g. triallyl cyanurate, isocyanurate or trimesate). In particular (P1) is derived from one or more of butyl, methyl, ethyl or 2-methylhexyl (meth)acrylates and styrene; and P2 is derived from one or more of methyl methacrylate, styrene, vinyl chloride, (meth)acrylic acid and hydroxyethyl (meth)acrylate. (P2) preferably contains at least 50 wt. % hydrophobic monomers.

ABEX EXAMPLE - A mixture of 1480 g demineralized water and 5 g disodium phosphate, 208 g 3.84% aqueous solution of sodium lauryl sulfate and a solution of 4.3 g potassium persulfate in 97.9 g water was heated to 80degreesC and treated continuously over 1 hour with a mixture of 722 g n-butyl acrylate, 309.4 g methyl methacrylate and 10.9 g 1,4-butanediol diacrylate, with simultaneous addition of a solution of 0.96 g sodium bisulfite in 34 g water. After stirring at 80degreesC for a further 30 minutes, a mixture of 26.5 g n-butyl acrylate and 5.7 g diallyl maleate and 4.7 g of 4.47 wt. % sodium bisulfite solution were added, followed by addition of a mixture of 66.05 g methyl methacrylate and a solution of 0.28 g sodium persulfate in 6.37 g water over 30 minutes. The mixture was

kept at 80degreesC for 1 hour to give the soft core of the latex particles (conversion 98.4%). The reaction mixture was then treated under stirring at 80degreesC with a solution of 1 g sodium formaldehyde sulfoxylate in 6.37 g water, followed by treatment over 1 hour with a mixture of 182.5 g methyl methacrylate, 15.9 g methacrylic acid and 75 g water and a solution of 0.86 g tert. butyl hydroperoxide in 260 g water. After keeping the mixture at 80degreesC for a further 30 minutes, a solution of 0.5 g tert. butyl hydroperoxide and 0.21 g sodium bisulfite in 10 g water was added and the mixture was kept at 80degreesC for 1 hour, followed by cooling to room temperature. A graft copolymer latex was obtained (conversion 99%), having weight average particle size 85.3 nm, solids content 38.1%, Tg1 -10degreesC and Tq2 108degreesC. A dry film prepared from the latex had a modulus of elasticity of 102 MPa and a strain at the elastic limit of more than 2.7 MPa. A nail varnish based on the latex had good abrasion resistance.

L271 ANSWER 40 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-181076 [24] WPIX DOC. NO. CPI: C2002-056383 [24]

TITLE: Low cohesion, hydrophobic polymer agglomerate used in

water treatment, papermaking and pigment

compositions is based on units derived from ethylenically

unsaturated, highly water soluble monomers

DERWENT CLASS:

A14; D15; D21; F06; F09; G02; L02 CORPART J M; GOURMAND M; HIDALGO M; KOWALIK A; VAULOUP F INVENTOR:

PATENT ASSIGNEE: (AQOR-C) ATOFINA
COUNTRY COUNT. 1

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC _____ FR 2809107 A1 20011123 (200224)* FR 35[0]

APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE FR 2809107 A1 FR 2000-5365 20000427

PRIORITY APPLN. INFO: <u>FR 2000-5365</u> 20000427

INT. PATENT CLASSIF.:

IPC RECLASSIF.: C08F0002-32 [I,A]; C08F0002-32 [I,C]

ECLA: C08F0002-32

BASIC ABSTRACT:

FR 2809107 A1 UPAB: 20050525

NOVELTY - Low cohesion, hydrophobic polymer agglomerate of average size 50-1,000 microns comprises elementary particles of size 0.1-10 (0.2-5)

DETAILED DESCRIPTION - Low cohesion, hydrophobic polymer agglomerate of average size 50-1,000 microns comprises elementary particles of size 0.1-10(0.2-5) microns.

INDEPENDENT CLAIMS are included for the preparation of the agglomerates by:

- (a) forming an emulsion of an organic phase of a surfactant(s) and an aqueous phase of 20-80 (30-60) weight% monomer, the weight ratio of aqueous to organic phase being 0.5-4 (2.5-3.5) and the amount of surfactant being 0.1-10(0.5-6) weight%;
- (b) polymerizing at 5-120 degrees C using 0.0005-0.5 (0.01-0.1) weight% radical catalyst;

(c) removing water by azeotropic distillation; and

(d) distilling to remove organic solvent, organic dispersions containing 1-60 weight% hydrophilic polymers obtained by dispersing the agglomerates in an organic non-solvent, and aqueous solutions containing 0.1-30 weight% .% hydrophilic polymers obtained by dissolving the agglomerates.

USE - Used as a thickener as flocculants in <u>water</u> treatment, as dehydration agents for flocs, as retention agents in the paper industry, in a <u>pigment</u> composition, particularly in paints, <u>cosmetics</u>, adhesives, building, textiles and paper and as control agents for water uptake (claimed).

ADVANTAGE - The process is industrially efficable. MANUAL CODE:

CPI: A12-W06B; A12-W11H; A12-W11J; D04-A01B;

D08-B; F03-F17; F05-A02B; F05-A06C; G02-A03;

G03-B01; G03-B02; L02-D

TECH

POLYMERS - Preferred Materials: The polymers comprise 90-100 mol.% units (A) derived from ethylenically unsaturated, highly water soluble monomers, 0-10 mol.% units (B) derived from ethylenically unsaturated, poorly water soluble monomers, 0-1 mol.% crosslinking agent-derived units (C) and 0-5 mol.% units (D) derived from monomers with a hydrophobic group or the chemical modification of the polymer with chemical reactants (E) forming hydrophobic groups (claimed). Preferably (A) is one of over 20 monomers including (meth)acrylic acid, morpholine, (meth)acrylamide, di(m)ethylamino (meth)acrylate and dimethyl diallyl ammonium chloride, (B) is vinyl acetate, (methyl acrylate, butyl acrylate, methyl methacrylate or hydroxyethyl (meth)acrylate, (C) is from over 20 compounds including butanediol diacrylate, allyl methacrylate, N-methylol acrylamide and zinc acetate, (D) is of formula (CH2CH2O)nR (I) and (E) is of formula R1X(CH2CH2O)nR (II).

R = at least 8C hydrophobic group;n = 0-50 (8-25);

R1 = epoxide, alcohol, amine, isocyanate, halogen or carboxylic acid; and X = C, N, O or S.

ABEX EXAMPLE - A polymer powder of average agglomerate size 380 microns, average size after deagglomeration below 10 microns and viscosity of a 1% gel of 11,000 cP was prepared by heating 176.4 g glacial acetic acid, 44.1 g water and 78.4 g soda in 202.4 g water to 30 degrees C, and mixing with 0.17 g N-methylene-bis-acrylamide and 0.64 g Versenex 80(TM) to give an aqueous phase. This was mixed with an organic phase of 161 g heptane and 17.5 g sorbitan monooleate and heated to 30 degrees C. The emulsion was mixed with 5 g of a solution of 0.036 g cumene hydroperoxide in 4.96 g heptane, followed by 2 g Na2S2O5 and later 100 g heptane. 70-75% of the water was removed by heating at 115%, followed by cooling, then distillation at 115 degrees C. When used with blue pigment in a printing paste for fabrics, the image obtained was of a high quality and realistic color.

L271 ANSWER 41 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-019227 [03] WPIX

CROSS REFERENCE: 1996-180876

DOC. NO. CPI: C2002-005693 [03]

TITLE: Aqueous hair resin composition used as hair

styling composition, has iodopropynylbutylcarbamate

DERWENT CLASS: A14; A96; D21 INVENTOR: SCHWARTZ C

PATENT ASSIGNEE: (ROHM-C) ROHM & HAAS CO

COUNTRY COUNT: 10

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK L	A PG	MAIN IPC	
DD 1140554	71 00011010		10.503		
EP 1142554	A1 20011010	(200203)* E	N 19[0]	•	<
EP 1142554	B1 20021127	(200279) E	7	•	<
DE 69529003	E 20030109	(200312) Di	E		

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
EP 1142554 A1 Div Ex EP 1142554 A1	EP 1995-306789 19950926 EP 2001-112371 19950926
DE 69529003 E	DE 1995-69529003 19950926
DE 69529003 E	EP 2001-112371 19950926

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1142554 A1	Div ex	EP 705595 A
DE 69529003 E	Based on	EP 1142554 A

PRIORITY APPLN. INFO: US 1995-437449 19950508
US 1994-316008 1994100

INT. PATENT CLASSIF.:

IPC RECLASSIF.:

A61K0008-30 [I,C]; A61K0008-37 [I,A];
A61K0008-44 [I,A]; A61K0008-72 [I,C];
A61K0008-81 [I,A]; A61K0008-85 [I,A];
A61K0008-86 [I,A]; A61K0008-891 [I,A];
A61K0008-898 [I,A]; A61Q0005-00 [I,A];
A61Q0005-00 [I,C]; A61Q0007-02 [I,A];

A61Q0007-02 [I,C]

ECLA: A61K0008-37; A61K0008-44; A61K0008-81K4; A61K0008-81K6; A61K0008-85; A61K0008-86; A61K0008-891; A61K0008-894;

A61Q0005-00; A61Q0007-02

BASIC ABSTRACT:

EP 1142554 A1 UPAB: 20050524

NOVELTY - An <u>aqueous</u> hair resin composition has iodopropynylbutylcarbamate (IPBC), 1-60 weight% acrylic hair fixative resin(s), and <u>water</u>. The acrylic hair fixative resin(s) has 5-95 weight% 1-8C alkyl (meth)acrylate monomer(s), 2-70 weight% hydroxyalkyl(meth)acrylate monomer(s), and 2-50 weight% 3-8C monoethylenically unsaturated monocarboxylic acid monomer(s), based on the total weight of monomer.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of inhibiting microbial growth in an <u>aqueous</u> hair resin composition containing the acrylic hair fixative resin(s), by adding iodopropynylbutylcarbamate to hair resin composition.

USE - The invented composition is used as hair styling composition, e.g. hair spray, styling gel, spray-on gel, or mousse.

ADVANTAGE - The IPBC used in the invented composition is effective in inhibiting microbial growth, does not destabilize the acrylic hair resin emulsion, and does not hurt the performance of the invented composition.

MANUAL CODE:

CPI: A04-F01A; A12-V04A; D08-B05

TECH

POLYMERS - Preferred Composition: The 1-8C alkyl (meth)acrylate monomer includes 5-71 wt.% (preferably 41-60 wt.%) 1-3C alkyl methacrylate monomer, and 2-67 wt.% (preferably 10-30 wt.%) 2-5C alkyl acrylate monomer, based on the total weight of monomer in the resin. Preferred Monomers: The hydroxyalkyl (meth)acrylate monomer includes hydroxy(1-5C)alkyl (meth)acrylate monomer, preferably hydroxymethyl

(meth)acrylate, hydroxyethyl (meth)acrylate, hydroxypropyl (meth) acrylate, hydroxybutyl (meth)acrylate, or

hydroxypentyl (meth) acrylate. The 3-8C monoethylenically unsaturated monocarboxylic acid monomer includes (meth)acrylic acid, or crotonic acid. Preferred Properties: The acrylic hair fixative resin has a weight average molecular weight of 40,000-100,000 (preferably 40,000-60,000), and a calculated glass transition temperature of $40-80 \, \text{degreesC}$ (preferably $45-75 \, \text{degreesC}$).

ABEX EXAMPLE - An aqueous hair resin composition contained (wt.%) IPBC (0.005), and an aqueous hair resin emulsion. The aqueous hair resin emulsion contained (wt.%) active solids of hair resin (41), sodium lauryl sulfate (0.20), and water. The hair resin contained (wt.%) butyl acrylate (25), methyl methacrylate (47), hydroxyethylmethacrylate (10), and methacrylic acid (18).

L271 ANSWER 42 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-035671 [05] WPIX

DOC. NO. CPI: C2002-010242 [05]

TITLE: Dimensionally stable hard capsules, e.g. for

pharmaceutical use, formed from (partially) saponified vinyl ester (co)polymer prepared by polymerization in

presence of polyether compound

DERWENT CLASS: A14; A25; A96; B07

INVENTOR: ANGEL M; GOTSCHE M; KOLTER K; SANNER A; ANGER M; KERT K;

SANNA A

PATENT ASSIGNEE: (ANGE-I) ANGEL M; (BADI-C) BASF AG; (GOTS-I) GOTSCHE M;

(KOLT-I) KOLTER K; (SANN-I) SANNER A

COUNTRY COUNT: 29

PATENT INFORMATION:

PATENT NO	KIND I	DATE	WEEK	LA	PG	MAIN IPC	
EP 1138322	A2 2	0011004	(200205)*	DE	23[0]		<
DE 10015468	A1 20	0011011	(200205)	DE			<
US 20010036471	A1 20	0011101	(200205)	EN			<
JP 2001327854	A 20	0011127	(200210)	JA	17		<
CN 1319615	A 20	0011031	(200215)	ZH			<
EP 1138322	B1 20	0040623	(200442)	DE			
DE 50102650	G 20	0040729	(200452)	DE			
US 6783770	B2 20	0040831	(200457)	EN			
ES 2223665	T3 20	0050301	(200519)	ES			
CN 1176956	C 20	0041124	(200617)	ZH			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1138322 A2 DE 10015468 A1 DE 50102650 G DE 50102650 G ES 2223665 T3 US 20010036471 US 6783770 B2 CN 1319615 A		EP 2001-105544 DE 2000-100154 DE 2001-502650 EP 2001-105544 EP 2001-105544 US 2001-811542 US 2001-811542 CN 2001-112308	20010306 68 20000329 20010306 20010306 20010306 20010320 20010320
JP 2001327854 CN 1176956 C	A	JP 2001-96232 CN 2001-112308	20010329

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 50102650 G ES 2223665 T3	Based on Based on	EP 1138322 A EP 1138322 A
	DE 2000-10015468	20000329
INT. PATENT CLASSIF.: MAIN:	: A61K009-48	
SECONDARY: IPC RECLASSIF.:	C08F008-12	.61K0047-32 [I,C]; A61K0047-34 [I,A];
IIC NECLASSIE	A61K0047-34 [I,C]; A	.61K0047-36 [I,A]; A61K0047-36 [I,C];
	A61K0047-42 [I,A]; A [I,A]; A61K0008-02	.61K0047-42 [I,C]; <u>A61K0008-02</u>
	[I,A]; A61K0008-11 [I,C]; A61K0008-30
	[I,C]; A61K0008-64 [I,C]; A61K0008-73 [
	[I,A]; A61K0009-48	[I,A]; A61K0009-48 [I,C]; B01J0013-06
	[I,C]; B01J0013-14 [I,A]	[I,A]; C08F0283-00 [I,C]; C08F0283-06
ECLA:	A61K0009-48B; C08F02	83-06+218/04
USCLASS NCLM: BASIC ABSTRACT:	424/451.000	
	2 A2 UPAB: 20050902	la.
	 Hard capsules contagonal polymer obtained by respectively 	in: adical polymerization of at least one 1-
		in presence of a polyether compound (b) lowed by at least partial saponification
of the ester re	sidues in the obtained	d copolymer;
	optional structure-imp further conventional of	proving auxiliaries; and
DETAILED	DESCRIPTION - Hard ca	apsules contain:
		al polymerization of at least one 1-24C resence of a polyether compound (b) and
optionally como polyether (b) h	nomer(s) (c) (provided as number average mole	d that if comonomers (c) are absent then ecular weight of 10000 or less), followed
by at least par copolymer;	tial saponification of	f the ester residues in the obtained
	onal structure-improveher conventional compo	
		ded for the use of the polymers (A) for
	of hard capsules as a mber average molecular	above, provided that if (c) are absent,
USE – Th	e capsules are especia	ally for pharmaceutical applications, but
		t protectants, cleaning agents or s of the capsules are specifically
selected from d	rugs, vitamins, carote	enoids, minerals, trace elements,
		tive agents, plant protectants, bath gagents or detergents (all claimed).
		high elasticity and flexibility, and in an capsules of gelatin or prior art
gelatin substitutes.	_	
MANUAL CODE:	CPI: A04-F09; A04-F1 A12-W05; B04-B03B; B	0; A05-H01A; A09-A05; A12-V01; 04-C03C; B12-M11C
TECH		
		lyether (b) is of formula -(R3O)y-(R4O)z)s)n-R5 (I).
R1 = H, 1-24C al	lkyl, R6CO, R6NHCO or lkyl, R6CO or R6NHCO;	
	(CH2)3, (CH2)4, CH2CH	R6 or CH2CH(OR7)CH2;

```
R6 = 1-24C \text{ alkyl};
     R7 = as R5;
     A = C(0)0, C(0)-B-C(0)0 \text{ or } C(0)NH-B-C(0)0;
     B = (CH2)t or arylene (optionally substituted);
     n = 1-1000;
     s = 0-1000;
     t = 1-12;
     u = 1-5000;
     v, w, x, v, z = 0-5000;
     provided that if polymerization is carried out in the absence of (c), then
     (b) has a number average molecular weight of 300-10000, n = 1-200, s =
     0-200; u = 1-250 and v, w, x, y, z = 0-200.
     (A) is preferably obtained by radical polymerization of (a) in the
     presence of (b) and optionally 0-20 wt. % comonomer(s) (c), followed by at
     least partial saponification. (b) Is obtained by polymerization of
     alkylene oxide-containing ethylenically unsaturated monomers, optionally
     together with comonomer(s). (A) preferably comprise 10-98 (especially
     65-97) wt.% (a), 2-90 (especially 3-35) wt. % (b) and 0-50 (especially
     0-20) wt. % (c). (A) is optionally post-crosslinked, especially using
     dialdehydes, diketones, dicarboxylic acids, boric acid (or its salt) or
     salts of polyvalent cations.
     Preferred comonomers: (c) comprise one or more of (meth)acrylic, maleic,
     fumaric or crotonic acid; maleic anhydride or its hemi-ester; methyl,
     ethyl, n-butyl, tert. butyl, isobutyl, stearyl, 2-hydroxyethyl,
     hydroxypropyl or alkylene glycol (meth)acrylates; 2-ethylhexyl
     acrylate; N-(tert. butyl or octyl)-acrylamide;
     styrene; unsaturated sulfonic acids (e.g. acrylamidopropane-sulfonic
     acid); vinyl-pyrrolidone, -caprolactam, -formamide, -methylacetamide or
     -amine; vinyl ethers (e.g. methyl, ethyl, butyl or dodecyl vinyl ether);
     1-vinylimidazole or 1-methyl-2-methyl-imidazole; N,N-dimethylaminomethyl
     or N,N-dimethylaminoethyl methacrylate; N-(3-dimethylamino)-propyl)-
     methacrylamide (optionally quaternized with methyl chloride, methyl
     sulfate or diethyl sulfate); or 3-methyl-1-vinyl-imidazolium chloride or
     methylsulfate.
     Preferred additives: (B) are selected from polymers of molecular weight
     more than 50000, crosslinking agents for the chain of (A) and optionally
     crosslinking agents for the polymers (B). The polymers (B) are
     specifically selected from polyaminoacid derivatives (e.g. gelatin, zein,
     soya protein or derivatives); polysaccharides (e.g. optionally degraded
     starch, maltodextrins, carboxymethyl starch, cellulose, hydroxypropyl
     methyl cellulose, hydroxypropyl cellulose, hydroxyethyl cellulose, methyl
     cellulose, carboxymethyl cellulose, ethyl cellulose, cellulose acetate,
     cellulose acetate-phthalate, hydroxypropyl methyl cellulose
     acetate-phthalate, hydroxypropyl methyl cellulose acetate-succinate,
     hemicellulose, galactomannans, pectins, alginates, carrageenans, xanthan,
     gellan, dextran, curdlan, pullulan, gum arabic, chitin or derivatives);
     and synthetic polymers (e.g. poly(meth)acrylic acid, (meth)acrylate ester
     copolymers, polyvinyl <u>alcohol</u>, polyvinyl acetate, polyethylene
     glycol, polyoxyethylene-polyoxypropylene block copolymers,
     polyvinyl pyrrolidone and derivatives. (C) are fillers, mold release
     agents, flow aids, dyes, pigments, opacifying agents, aromas,
     sweeteners, plasticizers, preservatives and/or active agents.
     Preferred capsules: The shell comprises 10-100\% (A), 0-80\% (B) and 0-30\%
     (C). The capsules are obtained by a dipping method. The capsule shell
     optionally contains 20-80% of a gastric juice-resistant polymer,
     specifically in the form of a coating.
ABEX EXAMPLE - The tip of a stainless steel dipstick (rendered hydrophobic
    with silicone emulsion; diameter 7.15 mm for the lower part of a capsule
     or 7.45 mm for the upper part) was immersed in a solution of 400 g of a
     polymer of vinyl acetate and polyethylene glycol 6000 (ratio 95:5; degree
```

of hydrolysis not specified) in 600 g demineralized water, then dried under rotation in air at 90degreesC. The obtained shaped article was removed and cut to the required length. Upper and lower parts obtained by this method were combined to give strong, elastic capsules which showed no change in shape when stored for 3 months at 23degreesC and 53% relative humidity. Comparative capsules obtained using a polymer derived from polyethylene glycol 20000 were soft, readily deformable and not dimensionally stable on storage.

L271 ANSWER 43 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2001-318850 [34] WPIX

DOC. NO. CPI: C2001-098302 [34]

TITLE: Cosmetic composition for use in setting and

maintaining hairstyle, contains silicone/acrylate

copolymer and grafted silicone polymer

DERWENT CLASS: A14; A26; A96; D21

INVENTOR: DUPUIS C

PATENT ASSIGNEE: (OREA-C) L'OREAL SA

COUNTRY COUNT: 31

PATENT INFORMATION:

PATENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
EP 1084698	A1	20010321	(200134)*	FR	12[0]	
AU 2000056487	A	20010322	(200134)	ΕN		
BR 2000004351	A	20010410	(200134)	PΤ		
CA 2319959	A1	20010316	(200134)	FR		
FR 2798844	A1	20010330	(200134)	FR		
JP 2001114655	A	20010424	(200140)	JA	10	
CN 1293028	A	20010502	(200143)	ZH		
KR 2001030416	A	20010416	(200163)	KO		
AU 750093	В	20020711	(200257)	ΕN		
RU 2197221	C2	20030127	(200321)	RU		
KR 364307	В	20021212	(200336)	KO		
EP 1084698	В1	20030709	(200353)	FR		
DE 60003763	E	20030814	(200361)	DE		
ES 2202018	Т3	20040401	(200425)	ES		
JP 2004307517	Α	20041104	(200472)	JA	16	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
EP 1084698	A1	EP 2000-402377 20000828
FR 2798844	A1	FR 1999-11596 19990916
DE 60003763	E	DE 2000-60003763 20000828
DE 60003763	E	EP 2000-402377 20000828
ES 2202018	T3	EP 2000-402377 20000828
AU 20000564	87 A	AU 2000-56487 20000905
AU 750093 B	S.	AU 2000-56487 20000905
JP 20011146	55 A	JP 2000-277134 20000912
JP 20043075	17 A Div Ex	JP 2000-277134 20000912
BR 20000043	51 A	BR 2000-4351 20000915
CA 2319959	A1	CA 2000-2319959 20000915
CN 1293028	A	CN 2000-128741 20000915
RU 2197221	C2	RU 2000-123753 20000915
KR 20010304	16 A	KR 2000-54438 20000916
KR 364307 B	S	KR 2000-54438 20000916
JP 20043075	17 A	JP 2004-226152 20040802

FILING DETAILS:

```
DE 60003763 E Based on EP 1084698 A ES 2202018 T3 Based on EP 1084690 T KR 364307 B Previous T
       PATENT NO KIND
                                                    PATENT NO
       _____
PRIORITY APPLN. INFO: FR 1999-11596 19990916
INT. PATENT CLASSIF.:
             MAIN: A61K007-11; A61K007-40
       SECONDARY:
                        A61K007-06; A61K007-11
 IPC RECLASSIF.:
                        A61K0008-00 [I,A]; A61K0008-00 [I,C];
                           A61K0008-30 [I,C]; A61K0008-64 [I,A];
                           A61K0008-67 [I,A]; A61K0008-72 [I,A];
                           A61K0008-72 [I,C]; A61K0008-89 [I,A];
                           A61K0008-891 [I,A]; A61K0008-91 [I,A];
                           A61K0008-96 [I,A]; A61K0008-96 [I,C];
A61K0008-97 [I,A]; A61Q0001-00 [I,A];
A61Q0001-00 [I,C]; A61Q0001-02 [I,C];
                           A61Q0001-04 [I,A]; A61Q0001-10 [I,A];
                          A61Q0019-00 [I,A]; A61Q0019-00 [I,C];
A61Q0003-00 [I,A]; A61Q0003-00 [I,C];
A61Q0003-02 [I,A]; A61Q0003-02 [I,C];
A61Q0005-00 [I,A]; A61Q0005-00 [I,C];
A61Q0005-06 [I,A]; A61Q0005-06 [I,C];
                           C08K0005-00 [I,A]; C08K0005-00 [I,C]; C08L0051-00 [I,C];
                           C08L0051-08 [I,A]; C08L0083-00 [I,C]; C08L0083-04 [I,A];
                          C08L0083-10 [I,A]; C08L0089-00 [I,A]; C08L0089-00 [I,C];
                          C08L0091-00 [I,A]; C08L0091-00 [I,C]
ECLA:
                          A61K0008-895; A61Q0005-06
BASIC ABSTRACT:
```

EP 1084698 A1 UPAB: 20050705

NOVELTY - <u>Cosmetic</u> comprises silicone/acrylate copolymer A, obtained by radical polymerization of ethylenically unsaturated monomer (a) in presence of silicone derivative (b) comprising oxyalkylene groups, and grafted silicone polymer B with polysiloxane skeleton grafted with organic non-silicone monomers.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for 1) process of maintaining or setting a hair style involving application of composition as claimed; 2) the use of composition as claimed for making cosmetic product for use on hair; and 3) use of composition as claimed for cosmetic treatment of skin, nails, lips, hair, eyebrows and eyelashes.

USE - In production of <u>cosmetic</u> articles, especially for treatment of hair; and as <u>cosmetic</u> product for use on skin, nails, lips, hair, eyelashes and eyebrows. MANUAL CODE: CPI: A04-F06E5; A06-A00E3; A12-V04A; A12-V04C; D08-B05

Member (0005)

ABEQ FR 2798844 A1 UPAB 20050705

NOVELTY - <u>Cosmetic</u> comprises silicone/acrylate copolymer A, obtained by radical polymerization of ethylenically unsaturated monomer (a) in presence of silicone derivative (b) comprising oxyalkylene groups, and grafted silicone polymer B with polysiloxane skeleton grafted with organic non-silicone monomers.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for 1) process of maintaining or setting a hair style involving application of composition as claimed; 2) the use of composition as claimed for making

cosmetic product for use on hair; and 3) use of composition as claimed for <u>cosmetic</u> treatment of skin, nails, lips, hair, eyebrows and eyelashes.

USE - In production of <u>cosmetic</u> articles, especially for treatment of hair; and as <u>cosmetic</u> product for use on skin, nails, lips, hair, eyelashes and eyebrows.

Member (0006)

ABEQ JP 2001114655 A UPAB 20050705

NOVELTY - <u>Cosmetic</u> comprises silicone/acrylate copolymer A, obtained by radical polymerization of ethylenically unsaturated monomer (a) in presence of silicone derivative (b) comprising oxyalkylene groups, and grafted silicone polymer B with polysiloxane skeleton grafted with organic non-silicone monomers.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for 1) process of maintaining or setting a hair style involving application of composition as claimed; 2) the use of composition as claimed for making cosmetic product for use on hair; and 3) use of composition as claimed for cosmetic treatment of skin, nails, lips, hair, eyebrows and eyelashes.

USE - In production of <u>cosmetic</u> articles, especially for treatment of hair; and as <u>cosmetic</u> product for use on skin, nails, lips, hair, eyelashes and eyebrows.

Member (0007)

ABEQ CN 1293028 A UPAB 20050705

NOVELTY - <u>Cosmetic</u> comprises silicone/acrylate copolymer A, obtained by radical polymerization of ethylenically unsaturated monomer (a) in presence of silicone derivative (b) comprising oxyalkylene groups, and grafted silicone polymer B with polysiloxane skeleton grafted with organic non-silicone monomers.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for 1) process of maintaining or setting a hair style involving application of composition as claimed; 2) the use of composition as claimed for making cosmetic product for use on hair; and 3) use of composition as claimed for cosmetic treatment of skin, nails, lips, hair, eyebrows and eyelashes.

USE - In production of <u>cosmetic</u> articles, especially for treatment of hair; and as <u>cosmetic</u> product for use on skin, nails, lips, hair, eyelashes and eyebrows.

TECH

ORGANIC CHEMISTRY - Preferred Components: The composition may also contain at least one additive selected from anionic, cationic, amphoteric or nonionic surfactants, perfumes, preservatives, proteins, vitamins, polymers different from the main components, and mineral, vegetable or synthetic oils. Monomer (a) has formula X-C(O)-CR7=CHR6 (Ia). X = OH, OM, OR8, NH2, NHR8, N(R8)2; M = cation selected from Na+, K+, Mg++, NH4+, alkylammonium, di-, tri- or tetra- alkyl ammonium; R8 = identical or different H, 1-40C linear or branched alkyl, 1-40C monoand poly-hydroxylated alkyls, optionally substituted with one or more alkoxy, amino or carboxy groups, hydroxyl- polyether groups, N, Ndimethyl- aminoethyl, 2-hydroxyethyl, 2-methoxyethyl, 2-ethoxyethyl, hydroxypropyl, methoxypropyl or ethoxypropyl groups; R7 and R6 = independently H, 1-8C linear or branched alkyls, methoxy, ethoxy, 2-hydroxyethoxy, 2-methoxyethoxy, 2-ethoxyethyl, CN, COOH or COOM . Monomer (a) is selected from 1-40C vinyl and allyl esters, 3-40C linear or cyclic carboxylic acids, vinyl or allyl halides, vinyl lactams (preferably vinyl pyrrolidone and vinyl caprolactam), heterocyclic compounds substituted with vinyl or allyl groups (preferably

```
vinylpyridine, vinyloxazoline and allylpyridine), N-vinyl imidazoles,
     diallylamines, vinylidene chloride, unsaturated C compounds e.g. styrene
     or isoprene and quaternized (with epichlorohydrin) derivatives of
     (meth)acrylic acid (more specified examples of (a) are further quoted).
     POLYMERS - Preferred Components: Silicone derivative (b) has formula (I).
     R2 = CH3 or group of formula (c);
     R3 = CH3 \text{ or } R2;
     R4 = H, CH3, -(CO)n-R6, or group of formula (d);
     R6 = 1-40C organic group optionally containing amino, carboxyl or
     sulfonate groups, and is an anion of inorganic acid for c equal 0;
     R1 = identical or different 1-20C aliphatic hydrocarbon, 3-20C aliphatic
     or cycloaliphatic hydrocarbon or -(CH2)n(formula (c));
     n = 1-6;
     x, y = numbers selected in such way as to give polysiloxane with molecular
     wt. 300-30000;
     a, b = 0-50; and
     c = 0 \text{ or } 1.
     Silicone derivatives (b) are preferably selected from dimethicone
     polyols or silicone surfactants. Grafted silicone polymer B
     comprises main polysiloxane chain on which there is grafted (within the
     chain and also optionally at least at one of its ends) at least one
     organic group containing no Si. Polymer B is obtained by radical
     copolymerization of at least one anionic organic non-Si monomer (i),
     and/or hydrophobic organic non-Si monomer (ii) (both with one ethylenic
     unsaturation), with polysiloxane containing, in its chain, at least one
     functional group capable to react with above mentioned ethylenic
     unsaturations of non-Si organic monomers. Monomer (i) is selected from
     unsaturated linear or branched carboxylic acids, more specifically from
     (meth)acrylic, itaconic, fumaric and crotonic acids and maleic acid or
     anhydride, or their alkali, alkaline earth or ammonium salts, or their
     mixtures; while monomer (ii) is selected, on its own or in form of mixture
     of monomers, from esters of acrylic and/or methacrylic acid and
     alkanol (preferably 1-18C alkanol), more specifically
     from isooctyl, isononyl, 2-ethylhexyl, lauryl, isopentyl, n-butyl,
     isobutyl, methyl, tert.butyl, tridecyl and stearyl (meth)acrylate. Polymer
     B preferably contains, in its main chain, at least one anionic organic
     group obtained by radical (homo)polymerization of at least one anionic
     monomer of unsaturated carboxylic acid type, partially or totally
     neutralized in form of salt. Polymer B is chosen from silicone polymers
     containing group of formula (II).
     G1 = identical or different H, 1-10C alkyl or phenyl radical (preferably
     1-10C alkyl, especially methyl;
     G2 = identical or different 1-10C alkylene group (preferably 1-3C divalent
     radical, especially propylene radical);
     G3 = polymeric group obtained by (homo)polymerization of at least one
     ethylenically unsaturated anionic monomer (preferably of carboxylic acid
     type, especially at least acrylic and/or methacrylic acid);
     G4 = polymeric group obtained by (homo)polymerization of at least one
     ethylenically unsaturated hydrophobic monomer (preferably of 1-10C alkyl
     (meth)acrylate type, especially isobutyl or methyl
     (meth)acrylate);
     m and n = 0 or 1;
     a = 0-50;
     b = 10-350; and
     c = 0-50, but at least one of a and c is different from 0.
     Number molecular wt. of B is 10000-1000000, preferably 10000-100000.
     Preferred Composition: The composition contains 0.1-20 (preferably 0.5-10)
     wt.% of copolymer A and 0.1-20 (preferably 0.2-10) wt.% of grafted
     silicone polymer B.
ABEX EXAMPLE - None chosen.
```

L271 ANSWER 44 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1999-045336 [04] WPIX

DOC. NO. CPI: C1999-014245 [04]

TITLE: Film forming composition, used as protective barriers, on

e.g. floor and skin - comprises polymer containing

strong <u>cationic</u> groups and acid groups, and

specified solvent mixture

DERWENT CLASS: A13; A14; A96; D21

INVENTOR: MUSSELL D; MUSSELL R D; SCHMIDT D L; SCHMIDT L

PATENT ASSIGNEE: (DOWC-C) DOW CHEM CO; (DOWC-C) DOW GLOBAL TECHNOLOGIES

INC

COUNTRY COUNT: 81

PATENT INFORMATION:

PA]	TENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
WO	9853796	 A1	19981203	(199904)*	EN	 24[4]	
AU	9875675	A	19981230	(199918)	EN		
US	5910532	А	19990608	(199930)	EN		
EP	983052	A1	20000308	(200017)	EN		
MX	9911002	A1	20000401	(200124)	ES		
KR	2001013153	A	20010226	(200154)	KO		
JΡ	2002501565	W	20020115	(200207)	JA	26	
EP	983052	В1	20040901	(200457)	EN		
${\tt TW}$	579385	А	20040311	(200458)	ZH		
DE	69825986	E	20041007	(200466)	DE		
DE	69825986	Т2	20050922	(200562)	DE		

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
WO 9853796 A1	WO 1998-US9493 19980513
US 5910532 A	US 1997-865536 19970529
AU 9875675 A	AU 1998-75675 19980513
DE 69825986 E	DE 1998-69825986 19980513
DE 69825986 T2	DE 1998-69825986 19980513
EP 983052 A1	EP 1998-923367 19980513
EP 983052 B1	EP 1998-923367 19980513
DE 69825986 E	EP 1998-923367 19980513
DE 69825986 T2	EP 1998-923367 19980513
EP 983052 A1	WO 1998-US9493 19980513
JP 2002501565 W	WO 1998-US9493 19980513
EP 983052 B1	WO 1998-US9493 19980513
DE 69825986 E	WO 1998-US9493 19980513
DE 69825986 T2	WO 1998-US9493 19980513
TW 579385 A	TW 1998-108351 19980528
JP 2002501565 W	JP 1999-500700 19980513
KR 2001013153 A	KR 1999-711136 19991129
MX 9911002 A1	MX 1999-11002 19991129

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69825986 E DE 69825986 T2	Based on Based on	EP 983052 A EP 983052 A
AU 9875675 A	Based on	WO 9853796 A

```
EP 983052 A1
                            Based on
                                            WO 9853796 A
      JP 2002501565 W
                            Based on
                                            WO 9853796 A
     EP 983052 B1
                            Based on
                                            WO 9853796 A
      DE 69825986 E
                            Based on
                                            WO 9853796 A
      DE 69825986 T2
                            Based on
                                            WO 9853796 A
PRIORITY APPLN. INFO: US 1997-865536
                                            19970529
                        WO 1998-US9493
                                              19980513
INT. PATENT CLASSIF.:
                      A61K007-48; C08L101-02; C09D201-02
           MAIN:
      SECONDARY:
                      C09D004-06
                      A61K007-00
     ADDITIONAL:
 IPC RECLASSIF.:
                      A61K0008-30 [I,C]; A61K0008-31 [I,A];
                      A61K0008-34 [I,A]; A61K0008-36 [I,A];
                      A61K0008-37 [I,A]; A61K0008-38 [I,A];
                      A61K0008-39 [I,A]; A61K0008-40 [I,A];
                      A61K0008-42 [I,A]; A61K0008-46 [I,A];
                      A61K0008-49 [I,A]; A61K0008-72
                                                     [I,A];
                      A61K0008-72 [I,C]; C08L0101-00 [I,C]; C08L0101-02
                       [I,A]; C09D0133-00 [I,A]; C09D0133-00 [I,C]; C09D0133-06
                       [I,A]; C09D0133-06 [I,C]; C09D0157-00 [I,C]; C09D0157-06
                       [I,A]; C09D0201-02 [I,A]; C09D0201-02 [I,C]; C09D0005-00
                       [I,A]; C09D0005-00 [I,C]; C09D0007-00 [I,A]; C09D0007-00
                       [I,C]
                      A61K0007-40; A61K0007-48N; C09D0005-00F; C09D0007-00B;
ECLA:
                      C09D0133-06B+C
USCLASS NCLM:
                      524/556.000
       NCLS:
                      524/816.000; 524/832.000
BASIC ABSTRACT:
```

WO 1998053796 A1 UPAB: 20060114

Composition (I) comprises: (A) a polymer containing strong <u>cationic</u> groups, and acid groups; and (B) a multi-solvent medium containing <u>water</u>, a low boiling <u>polar</u> organic solvent (B 1) having at least one hydroxyl group, <u>water</u> soluble, b.pt. = 70-134°C, and optionally a high boiling point solvent (B 2), b.pt. = 135-250°C. Components of (B) are in such proportions that, when (A) is dispersed in (B), (I) forms a dust free and tack free film after being applied to a substrate. When the strong <u>cationic</u> groups of (A) are structural units formed from polymerisation of a vinylbenzyl trialkyl ammonium salt, a dialkyl ammonium salt, a benzylsulphonium salt, a cyclic sulphonium salt, a tri-(1-18 C) alkyl- vinylbenzyl phosphonium salt, a tri (1-18 C) aralkyl-vinylbenzyl phosphonium salt, or a tri (1-18 C) aryl- vinylbenzyl phosphonium salt, then (B) contains (B 2).

Also claimed is preparation of a dust free and tack free coating by: (a) polymerising a strong <u>cationic</u> monomer (M 1) trialkyl ammonium alkyl (meth)acrylate, trialkyl ammonium alkyl acrylamide, 2-methacryloxyethyl tri- (1-20 C) alkyl- phosphonium salt, 2-methacryloxy- ethyl tri- (1-20 C) aralkyl phosphonium salt, 2-methacryloxyethyl tri- (1-20 C) aryl- phosphonium salt, (3-18 C) alkenyltrialkyl phosphonium salt, (3-18 C) aralkyl phosphonium salt, or (3-18 C) aryl phosphonium salt, with a polymerisable acid monomer (M 2) and a polymerisable non-interfering monomer (M 3), where mole ratio M 3 to M 1 and M 2 = 70:30-95:5; (b) dispersing the polymer in a multi-solvent medium containing <u>water</u> and a low boiling organic solvent of b.pt $70-134^{\circ}$ C, having at least one hydroxyl group; and (c) applying the dispersed polymer to a substrate to form a coating. Proportions of the mixture are such that the coating is dust free and tack free in < 15 minutes.

USE - The coatings form protective barriers, e.g. for floors, automobiles, house exterior or interior, counter tops, wood furniture or human skin.

ADVANTAGE - They are resistant to <u>water</u>, but can easily be removed with solvent mixtures, e.g. water and 1-propanol. They can be rendered substantially

permanent by addition of a crosslinking agent or inclusion of a polymerisable acid, with subsequent curing, or inclusion of a crosslinkable functional group. MANUAL CODE: CPI: A12-B01; D08-B09A; D09-E

Member (0003)

ABEQ US 5910532 A UPAB 20060114

Composition (I) comprises: (A) a polymer containing strong cationic groups, and acid groups; and (B) a multi-solvent medium containing water, a low boiling polar organic solvent (B 1) having at least one hydroxyl group, water soluble, b.pt. = 70-134°C, and optionally a high boiling point solvent (B 2), b.pt. = 135-250°C. Components of (B) are in such proportions that, when (A) is dispersed in (B), (I) forms a dust free and tack free film after being applied to a substrate. When the strong <u>cationic</u> groups of (A) are structural units formed from polymerisation of a vinylbenzyl trialkyl ammonium salt, a dialkyl ammonium salt, a benzylsulphonium salt, a cyclic sulphonium salt, a tri-(1-18 C) alkyl- vinylbenzyl phosphonium salt, a tri (1-18 C) aralkyl- vinylbenzyl phosphonium salt, or a tri (1-18 C) aryl- vinylbenzyl phosphonium salt, then (B) contains (B 2). Also claimed is preparation of a dust free and tack free coating by: (a) polymerising a strong <u>cationic</u> monomer (M 1) trialkyl ammonium alkyl (meth)acrylate, trialkyl ammonium alkyl acrylamide, 2-methacryloxyethyl tri- (1-20 C) alkyl- phosphonium salt, 2-methacryloxyethyl tri- (1-20 C) aralkyl phosphonium salt, 2-methacryloxyethyl tri-(1-20 C) aryl- phosphonium salt, (3-18 C) alkenyltrialkyl phosphonium salt, (3-18 C) aralkyl phosphonium salt, or (3-18 C) aryl phosphonium salt, with a polymerisable acid monomer (M 2) and a polymerisable non-interfering monomer (M 3), where mole ratio M 3 to M 1 and M 2 = 70:30-95:5; (b) dispersing the polymer in a multi-solvent medium containing water and a low boiling organic solvent of b.pt 70-134°C, having at least one hydroxyl group; and (c) applying the dispersed polymer to a substrate to form a coating. Proportions of the mixture are such that the coating is dust free and tack free in < 15 minutes.

 \mbox{USE} - The coatings form protective barriers, e.g. for floors, automobiles, house exterior or interior, counter tops, wood furniture or human skin.

ADVANTAGE - They are resistant to <u>water</u>, but can easily be removed with solvent mixtures, e.g. <u>water</u> and 1-propanol. They can be rendered substantially permanent by addition of a crosslinking agent or inclusion of a polymerisable acid, with subsequent curing, or inclusion of a crosslinkable functional group.

Member (0004)

ABEO EP 983052 A1 UPAB 20060114

Composition (I) comprises: (A) a polymer containing strong cationic groups, and acid groups; and (B) a multi-solvent medium containing water, a low boiling polar organic solvent
(B 1) having at least one hydroxyl group, water soluble, b.pt. = 70-134°C, and optionally a high boiling point solvent (B 2), b.pt. = 135-250°C. Components of (B) are in such proportions that, when (A) is dispersed in (B), (I) forms a dust free and tack free film after being applied to a substrate. When the strong cationic groups of (A) are structural units formed from polymerisation of a vinylbenzyl trialkyl ammonium salt, a dialkyl ammonium salt, a benzylsulphonium salt, a cyclic sulphonium salt, a tri-(1-18 C) alkyl- vinylbenzyl phosphonium salt, a tri (1-18 C) aralkyl- vinylbenzyl phosphonium salt, or a tri (1-18 C) aryl- vinylbenzyl phosphonium salt, then (B) contains (B 2). Also claimed is preparation of a dust free and tack free coating by: (a) polymerising a strong cationic monomer (M 1) trialkyl ammonium

alkyl (meth)acrylate, trialkyl ammonium alkyl acrylamide, 2-methacryloxyethyl tri- (1-20 C) alkyl- phosphonium salt, 2-methacryloxyethyl tri- (1-20 C) aralkyl phosphonium salt, 2-methacryloxyethyl tri- (1-20 C) aryl- phosphonium salt, (3-18 C) alkenyltrialkyl phosphonium salt, (3-18 C) aralkyl phosphonium salt, or (3-18 C) aryl phosphonium salt, with a polymerisable acid monomer (M 2) and a polymerisable non-interfering monomer (M 3), where mole ratio M 3 to M 1 and M 2 = 70:30-95:5; (b) dispersing the polymer in a multi-solvent medium containing water and a low boiling organic solvent of b.pt $70-134^{\circ}$ C, having at least one hydroxyl group; and (c) applying the dispersed polymer to a substrate to form a coating. Proportions of the mixture are such that the coating is dust free and tack free in < 15 minutes.

 \mbox{USE} - The coatings form protective barriers, e.g. for floors, automobiles, house exterior or interior, counter tops, wood furniture or human skin.

ADVANTAGE - They are resistant to <u>water</u>, but can easily be removed with solvent mixtures, e.g. <u>water</u> and 1-propanol. They can be rendered substantially permanent by addition of a crosslinking agent or inclusion of a polymerisable acid, with subsequent curing, or inclusion of a crosslinkable functional group.

Member (0006)

ABEQ KR 2001013153 A UPAB 20060114

Composition (I) comprises: (A) a polymer containing strong cationic groups, and acid groups; and (B) a multi-solvent medium containing water, a low boiling polar organic solvent (B 1) having at least one hydroxyl group, water soluble, b.pt. = 70-134°C, and optionally a high boiling point solvent (B 2), b.pt. = 135-250°C. Components of (B) are in such proportions that, when (A) is dispersed in (B), (I) forms a dust free and tack free film after being applied to a substrate. When the strong cationic groups of (A) are structural units formed from polymerisation of a vinylbenzyl trialkyl ammonium salt, a dialkyl ammonium salt, a benzylsulphonium salt, a cyclic sulphonium salt, a tri-(1-18 C) alkyl- vinylbenzyl phosphonium salt, a tri (1-18 C) aralkyl- vinylbenzyl phosphonium salt, or a tri (1-18 C) aryl- vinylbenzyl phosphonium salt, then (B) contains (B 2). Also claimed is preparation of a dust free and tack free coating by: (a) polymerising a strong <u>cationic</u> monomer (M 1) trialkyl ammonium alkyl (meth)acrylate, trialkyl ammonium alkyl acrylamide, 2-methacryloxyethyl tri- (1-20 C) alkyl- phosphonium salt, 2-methacryloxyethyl tri- (1-20 C) aralkyl phosphonium salt, 2-methacryloxyethyl tri-(1-20 C) aryl- phosphonium salt, (3-18 C) alkenyltrialkyl phosphonium salt, (3-18 C) aralkyl phosphonium salt, or (3-18 C) aryl phosphonium salt, with a polymerisable acid monomer (M 2) and a polymerisable non-interfering monomer (M 3), where mole ratio M 3 to M 1 and M 2 = 70:30-95:5; (b) dispersing the polymer in a multi-solvent medium containing water and a low boiling organic solvent of b.pt 70-134°C, having at least one hydroxyl group; and (c) applying the dispersed polymer to a substrate to form a coating. Proportions of the mixture are such that the coating is dust free and tack free in < 15minutes.

USE - The coatings form protective barriers, e.g. for floors, automobiles, house exterior or interior, counter tops, wood furniture or human skin.

ADVANTAGE - They are resistant to water, but can easily be removed with solvent mixtures, e.g. water and 1-propanol. They can be rendered substantially permanent by addition of a crosslinking agent or inclusion of a polymerisable acid, with subsequent curing, or inclusion of a crosslinkable functional group.

```
L271 ANSWER 45 OF 84 WPIX COPYRIGHT 2008
                                                THE THOMSON CORP on STN
ACCESSION NUMBER: 1998-448959 [39] WPIX DOC. NO. CPI: C1998-136174 [39]
DOC. NO. NON-CPI: N1998-350132 [39]
TITLE:
                      Latex composition for hair care - comprises hybrid-graft
                      copolymer comprising sulpho-polyester and acid-functional
                      polymer segment comprising acid-functional monomer,
                      ethylenically unsaturated monomer and amide-functional
                      monomer
DERWENT CLASS:
                      A14; A96; D21
INVENTOR:
                      CHEN R G; CHEN R G S; COOK P M
PATENT ASSIGNEE: (EACH-C) EASTMAN CHEM CO
COUNTRY COUNT:
                      2.5
PATENT INFORMATION:
                    KIND DATE WEEK LA PG
      PATENT NO
                                                            MAIN IPC
      ______
     EP 861655 A2 19980902 (199839)* EN 17[2]
US 6136884 A 20001024 (200055) EN
US 6299864 B1 20011009 (200162) EN
EP 861655 B1 20060906 (200659) EN
DE 69835782 E 20061019 (200670) DE
DE 69835782 T2 20061228 (200702) DE
                                                                              <--
                                                                              <--
APPLICATION DETAILS:
                                            APPLICATION DATE
      PATENT NO
                    KIND
      ______
                                            EP 1998-101761 19980202
      EP 861655 A2
                                            US 1997-37082P 19970204
      US 6136884 A Provisional
                                            US 1997-37082P 19970204
US 1998-16401 19980130
      US 6299864 B1 Provisional
      US 6136884 A
      US 6299864 B1 Div Ex
                                            US 1998-16401 19980130
      DE 69835782 E
                                            DE 1998-635782 1998020
                                            EP 1998-101761 19980202
      DE 69835782 E
                                            US 2000-575682 20000629
      US 6299864 B1
                                            DE 1998-635782 19980202
      DE 69835782 T2
                                            EP 1998-101761 19980202
      DE 69835782 T2
FILING DETAILS:
      PATENT NO KIND
                                            PATENT NO
      _____
      DE 69835782 E Based on
US 6299864 B1 Div ex
DE 69835782 T2 Based on
                                            EP 861655
                                             EP 861655 A
US 6136884 A
EP 861655
                                             EP 861655
                                      19970204
PRIORITY APPLN. INFO: US 1997-37082P
                                        19980130
20000629
                         US 1998-16401
                         US 2000-575682
INT. PATENT CLASSIF.:
  IPC ORIGINAL:
                       A61K0008-72 [I,C]; A61K0008-72 [I,C];
                       A61K0008-72 [I,C]; A61K0008-85 [I,A]; A61K0008-85 [I,A]; A61K0008-91 [I,A];
                       A61K0008-91 [I,A]; A61Q0005-06 [I,A];
                       A61Q0005-06 [I,A]; A61Q0005-06 [I,C];
                       C08G0063-00 [I,C]; C08G0063-00 [I,C]; C08G0063-91 [I,A];
                       C08G0063-91 [I,A]; A61K0008-72 [I,C]
```

IPC RECLASSIF.: A61K0008-72 [I,C]; A61K0008-85 [I,A]; A61K0008-91 [I,A]; A61Q0005-06 [I,A]; A61Q0005-06 [I,C]; C08G0063-00 [I,C]; C08G0063-688 [N,A]; C08G0063-91 [I,A]

ECLA: A61K0008-85; A61K0008-91; A61Q0005-06; C08G0063-91D2

ICO: M08G0063:688D2 USCLASS NCLM: 424/047.000

> NCLS: 424/062.000; 424/070.100; 424/070.110; 523/105.000;

523/201.000; 524/513.000; 524/603.000; 524/609.000;

525/445.000; 525/902.000

BASIC ABSTRACT:

UPAB: 20050828 EP 861655 A2

The following are claimed, e.g.: (A) latex composition for hair care comprising a hybrid-graft copolymer comprising: (a) 2-90 weight% of a sulphopolyester; and (b) 10-98 weight% of an acid-functional polymer segment comprising: (1) 15-50 weight% of an acid-functional monomer; (2) 10-80 weight% of an ethylenically unsaturated monomer; and (3) up to 40 weight% of an amide functional monomer. (B) a latex composition for hair care comprising a hybridgraft copolymer comprising: (a) 5-80 weight% of a sulphopolyester; (b) 15-55weight% of a first acid-functional polymer segment comprising: (1)-(3) as above; and (c) 5-40 weight% of a second acid-functional polymer segment comprising: (1)-(3) as above. The first and second acid-functional polymer segments have different glass transition temperatures.

USE - The compositions are useful in aerosol and pump hair spray formulations.

ADVANTAGE - The compositions have excellent curl retention even at high humidity and may be formulated over a wide range of volatile organic component content.

MANUAL CODE: CPI: A05-E03; A07-B03; A10-C03; A12-V04A; D08-B03;

D08-B05

L271 ANSWER 46 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1998-086535 [08] WPIX

1998-032610; 1998-032612; 2002-205791; 2002-749135 CROSS REFERENCE:

DOC. NO. CPI: C1998-029203 [08]

TITLE: New surfactant containing aceto-acetoxy-functional

> polymer for coatings - comprises polymerisation product of non-acid aceto-acetoxy functional vinyl monomer with

non-self polymerising surface active vinyl monomer

A14; A18; A26; A81; A82; B04; D15; D16; D21; F06; F09;

G02; G03; M13; M14

COLLINS M J; TAYLOR J W INVENTOR: (EACH-C) EASTMAN CHEM CO PATENT ASSIGNEE:

COUNTRY COUNT: 34

PATENT INFORMATION:

DERWENT CLASS:

PAI	CENT NO	KINI	DATE	WEEK	LA	PG	MAIN	IPC	
WO	9745468	 A1	19971204	(199808)*	EN	 71[1]			<
AU	9732122	A	19980105	(199821)	EN				<
EP	902800	A1	19990324	(199916)	EN				<
CN	1226260	Α	19990818	(199951)	ZH				<
BR	9709396	A	19990810	(199953)	PΤ				<
MX	9809963	A1	19990301	(200051)	ES				<
KR	2000016068	А	20000325	(200104)	KO	[1]			<
AU	729319	В	20010201	(200112)	EN				<
US	6297328		20011002	/	ΕN				<
_	2002502442		20020122	, ,	JA	64			<
EP	902800	В1	20020911	(200264)	EN				<

DE	69715404	E	20021017	(200276)	DE	
ES	2179349	Т3	20030116	(200316)	ES	
CA	2255702	С	20030617	(200347)	EN	
MX	213328	В	20030319	(200413)	ES	
JΡ	3727663	В2	20051214	(200582)	JA	38

APPLICATION DETAILS:

PATENT NO K		APPLICATION	
WO 9745468 A1		WO 1997-US8808 US 1996-18423P US 1996-18424P US 1996-28444P US 1997-861433 AU 1997-32122	19970528
US 6297328 B1 Pr	ovisional	US 1996-18423P	19960528
US 6297328 B1 Pro	ovisional	US 1996-18424P	19960528
US 6297328 B1 Pr	ovisional	US 1996-28444P	19961010
US 6297328 B1 Di	v Ex	US 1997-861433	19970521
AU 9732122 A		AU 1997-32122	19970528
AU 729319 B		AU 1997-32122	19970528
BR 9709396 A		BR 1997-9396 19	9970528
CA 2255702 C		CA 1997-2255702	2 19970528
CN 1226260 A		CN 1997-196842	19970528
DE 69715404 E		DE 1997-6971540	04 19970528
EP 902800 A1		EP 1997-927732	19970528
EP 902800 B1		EP 1997-927732	19970528
DE 69715404 E		EP 1997-927732	19970528
ES 2179349 T3		EP 1997-927732	***************************************
JP 2002502442 W		JP 1997-542788	*******
JP 3727663 B2		JP 1997-542788	19970528
EP 902800 A1		WO 1997-US8808	19970528
BR 9709396 A		WO 1997-US8808	
KR 2000016068 A		WO 1997-US8808	19970528
JP 2002502442 W		WO 1997-US8808	19970528
EP 902800 B1		WO 1997-US8808	19970528
DE 69715404 E		WO 1997-US8808	***************************************
CA 2255702 C		WO 1997-US8808	***************************************
MX 213328 B		WO 1997-US8808	19970528
JP 3727663 B2		WO 1997-US8808	19970528
US 6297328 B1		US 1998-50973	***************************************
KR 2000016068 A		KR 1998-709635	***************************************
MX 9809963 A1		MX 1998-9963 19	
MX 213328 B		MX 1998-9963 19	9981127

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 729319 B	Previous Pub	ol AU 9732122 A
DE 69715404 E	Based on	EP 902800 A
ES 2179349 T3	Based on	EP 902800 A
JP 3727663 B2	Previous Pub	ol JP 2002502442 W
US 6297328 B1	Div ex	US 6028155 A
AU 9732122 A	Based on	WO 9745468 A
EP 902800 A1	Based on	WO 9745468 A
BR 9709396 A	Based on	WO 9745468 A
KR 2000016068 A	Based on	WO 9745468 A
AU 729319 B	Based on	WO 9745468 A
JP 2002502442 W	Based on	WO 9745468 A
EP 902800 B1	Based on	WO 9745468 A
DE 69715404 E	Based on	WO 9745468 A
CA 2255702 C	Based on	WO 9745468 A
JP 3727663 B2	Based on	WO 9745468 A

<--

```
PRIORITY APPLN. INFO: US 1997-861433
                                            19970521
                         US 1996-18424P
                                               19960528
                         US 1996-18423P
                                               19960528
                        US 1996-28444P
WO 1997-US8808
                                               19961010
                                               19970528
                         US 1998-50973
                                               19980331
INT. PATENT CLASSIF.:
                      C08F220-04; C08F220-26
           MAIN:
 IPC RECLASSIF.:
                      C08F0212-00 [I,C]; C08F0212-06 [I,A]; C08F0218-00 [I,C];
                      C08F0218-04 [I,A]; C08F0220-00 [I,C]; C08F0220-04 [I,A];
                      C08F0220-20 [I,A]; C08F0220-26 [I,A]; C08F0220-28 [I,A];
                      C08F0220-34 [I,A]; C08F0220-38 [I,A]; C08F0246-00 [I,A];
                      C08F0246-00 [I,C]; C08F0008-00 [I,A]; C08F0008-00 [I,C];
                      C08F0008-32 [I,A]; C08L0025-00 [I,C]; C08L0025-02 [I,A];
                      C08L0027-00 [I,C]; C08L0027-06 [I,A]; C08L0033-00 [I,C];
                      C08L0033-16 [I,A]; C08L0033-26 [I,A]; C08L0057-00 [I,A];
                      C08L0057-00 [I,C]; C09D0011-10 [I,A]; C09D0011-10 [I,C];
                      C09D0133-06 [I,A]; C09D0133-06 [I,C]; C09D0133-14 [I,A];
                      C09D0133-14 [I,C]; C09D0133-24 [I,C]; C09D0133-26 [I,A];
                      C09J0133-06 [I,A]; C09J0133-06 [I,C]
                      C08F0008-00+220/00; C08F0220-28; C08F0246-00;
ECLA:
                      C09D0011-10F; C09D0133-06B; C09J0133-06B
USCLASS NCLM:
                      525/379.000
        NCLS:
                      525/328.600; 525/902.000
BASIC ABSTRACT:
```

WO 1997045468 A1 UPAB: 20060201

Surfactant containing acetoacetoxy functional polymer (I) comprises the reaction product of the free radical polymerisation of a non-acid vinyl monomer having an acetoacetoxy type functionality with \geq 1 non self polymerising surface active vinyl monomer. Also claimed are a surfactant containing, enamine functional polymer (II) comprising the reaction product of (I) and ammonia, a primary amine, a secondary amine or a polyalkylenimine, preferably polyethylenimine; a waterborne polymer composition (III) comprising (I) or (II) and water, where the average polymer particle size is 25-500 nmand a coating composition comprising (III) and \geq 1 additive selected from a solvent, pigment, buffer, levelling agent, rheology agent, curing agent, flow control agent, extender, reactive coalescing aid, flatting agent, pigment wetting agent, dispersing agent, surfactant, UV absorber, UV light stabiliser, defoaming agent, antifoaming agent, anti-settling agent, anti-sag agent, bodying agent, anti-skinning agent, anti-floading agent, anti-floating agent, fungicide, mildewcide, corrosion inhibitor, thickening agent, plasticiser, reactive plasticiser, drying agent, catalyst, crosslinking agent and coalescing agent.

USE - The polymers are useful in coating formulations, such as metal, wood, plastic, textile, cementitious and paper coatings, paints, inks, sealants and adhesives. They can be used as corrosion inhibitors, architectural, concrete, maintenance, industrial, automotive and textile back coatings, latex paints, laminating inks and surface printing inks. They may also be used as adhesion promoters for binding proteins and enzymes to inert substrates, a shampoo additive to improve hair substantivity, a dye fixative for textiles, a pigment dispersion for coatings or a flocculant in water treatment. They can scavenge residual α, β -unsaturated, carbonyl- or electron-withdrawing group-containing monomers from a polymer latex.

ADVANTAGE - The waterborne polymer compositions may be formulated as a single, stable composition but undergo crosslinking upon film formation imparting one or more desired properties to the resulting coating. They can be prepared with a high solids content while maintaining low viscosity.

MANUAL CODE: CPI: A05-J07; A07-B; A08-F05; A10-E01; A12-B01W;

A12-B01X; B04-C03B; <u>B14-R02</u>; D04-A; D05-A01A2;

D05-H10; D08-B04; F05-B; G02-A02B1; G02-A02B2; G02-A04A;

G02-A05; G02-A05C; G02-A05F; M13-H05; M14-K

L271 ANSWER 47 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1997-238554 [22] WPIX

DOC. NO. CPI: C1997-076721 [22]

TITLE: Cosmetic or dermatological composition used for

treating keratin material, especially human hair - containing polymer with organic non-silicone skeleton grafted with polysiloxane monomer and polymer with

polysiloxane skeleton grafted with organic non-silicone

monomer

DERWENT CLASS: A18; A26; A96; D21
INVENTOR: DUBIEF C; DUPUIS C
PATENT ASSIGNEE: (OREA-C) L'OREAL SA

COUNTRY COUNT: 4

PATENT INFORMATION:

PI	TENT NO	KINI	DATE	WEEK	LA	PG	MAIN IPC	
FF	2739288	A1	19970404	(199722)*	FR	24[0]		<
EF	773016	A1	19970514	(199724)	FR			<
JE	09110633	A	19970428	(199727)	JA	13[0]		<
EF	773016	В1	19980401	(199817)	FR	26[0]		<
DE	69600214	E	19980507	(199824)	DE			<
US	6011126	A	20000104	(200008)	ΕN			<
JE	3004210	В2	20000131	(200010)	JA	14		<

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
FR 2739288 A1	FR 1995-11487 19950929
DE 69600214 E	DE 1996-69600214 19960829
EP 773016 A1	EP 1996-401860 19960829
EP 773016 B1	EP 1996-401860 19960829
DE 69600214 E	EP 1996-401860 19960829
JP 09110633 A	JP 1996-257133 19960927
JP 3004210 B2	JP 1996-257133 19960927
US 6011126 A Cont of	US 1996-720530 19960930
US 6011126 A	US 1998-89446 19980603

FILING DETAILS:

PATENT 1	.4O	KIND			PAT	ENT NO		
DE 69600	0214 E	Bā	ased (on	ΕP	773016	A	

JP 3004210 B2 Previous Publ JP 09110633 A

PRIORITY APPLN. INFO: <u>FR 1995-11487</u> 19950929

INT. PATENT CLASSIF.:

MAIN: A61K007-48 SECONDARY: A61K007-06

IPC RECLASSIF.: A61K0008-00 [I,A]; A61K0008-00 [I,C];

A61K0008-30 [I,C]; A61K0008-34 [I,A]; A61K0008-37 [I,A]; A61K0008-64 [I,A]; A61K0008-72 [I,A]; A61K0008-72 [I,C]; A61K0008-89 [I,A]; A61K0008-891 [I,A];

A61K0008-899 [I,A]; A61K0008-91 [I,A]; A61K0008-92 [I,A]; A61K0008-92 [I,C]; A61K0008-96 [I,C]; A61K0008-97 [I,A]; A61K0008-98 [I,A]; A61C0005-00 [I,A]; A61C0005-00 [I,C]; A61C0005-02 [I,A]; A61C0005-02 [I,C]; A61C0005-06 [I,A]; A61C0005-06 [I,C]; A61C0005-12 [I,A]; A61Q0005-12 [I,C]; C08F0283-00 [I,C]; C08F0283-12 [I,A]; C08L0083-00 [I,C]; C08L0083-10 [I,A] A61K0008-899; A61Q0005-02; A61Q0005-06; A61Q0005-12 525/477.000

ECLA:

USCLASS NCLM:

424/070.120; 526/279.000 NCLS:

BASIC ABSTRACT:

FR 2739288 A1 UPAB: 20060113

A cosmetic or dermatological composition contains, in (a) a suitable medium, (b) a polymer with an organic non-silicone skeleton, grafted with monomers containing a polysiloxane, and (c) a polymer with a polysiloxanic skeleton grafted with organic, non-silicone monomers.

Also claimed is a process for non-therapeutic treatment of keratin materials in particular human hair.

USE - The composition is for the non-therapeutic treatment of keratin material, especially human hair.

ADVANTAGE - The softness of the hair and the styling are better. MANUAL CPI: A06-A00E3; A10-C03A; A12-V04A; D08-B03

Member (0003)

CODE:

ABEQ JP 09110633 A UPAB 20060113

> A cosmetic or dermatological composition contains, in (a) a suitable medium, (b) a polymer with an organic non-silicone skeleton, grafted with monomers containing a polysiloxane, and (c) a polymer with a polysiloxanic skeleton grafted with organic, non-silicone monomers. Also claimed is a process for non-therapeutic treatment of keratin materials in particular human hair.

USE - The composition is for the non-therapeutic treatment of keratin material, especially human hair.

ADVANTAGE - The softness of the hair and the styling are better.

Member (0004)

ABEQ EP 773016 B1 UPAB 20060113

> A cosmetic or dermatological composition contains, in (a) a suitable medium, (b) a polymer with an organic non-silicone skeleton, grafted with monomers containing a polysiloxane, and (c) a polymer with a polysiloxanic skeleton grafted with organic, non-silicone monomers. Also claimed is a process for non-therapeutic treatment of keratin materials in particular human hair.

USE - The composition is for the non-therapeutic treatment of keratin material, especially human hair.

ADVANTAGE - The softness of the hair and the styling are better.

Member (0006)

ABEO US 6011126 A UPAB 20060113

> A cosmetic or dermatological composition contains, in (a) a suitable medium, (b) a polymer with an organic non-silicone skeleton, grafted with monomers containing a polysiloxane, and (c) a polymer with a polysiloxanic skeleton grafted with organic, non-silicone monomers. Also claimed is a process for non-therapeutic treatment of keratin materials in particular human hair.

USE - The composition is for the non-therapeutic treatment of keratin material, especially human hair.

ADVANTAGE - The softness of the hair and the styling are better.

Member (0007)

ABEQ JP 3004210 B2 UPAB 20060113

A <u>cosmetic</u> or dermatological composition contains, in (a) a suitable medium, (b) a polymer with an organic non-silicone skeleton, grafted with monomers containing a polysiloxane, and (c) a polymer with a polysiloxanic skeleton grafted with organic, non-silicone monomers. Also claimed is a process for non-therapeutic treatment of keratin materials in particular human hair.

USE - The composition is for the non-therapeutic treatment of keratin material, especially human hair.

ADVANTAGE - The softness of the hair and the styling are better.

L271 ANSWER 48 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1997-194634 [18] WPIX

DOC. NO. CPI: C1997-062195 [18]

TITLE: Cosmetic aqueous hair styling and setting

compsn. - containing soluble or dispersible film-forming

acrylic* oligomer prepared from tert. butyl

(meth)acrylate and/or isobutyl

methacrylate, unsatd. carboxylic acid monomer and alkyl

acrylate

DERWENT CLASS: A14; A96; D21
INVENTOR: MOUGIN N; SAMAIN H
PATENT ASSIGNEE: (OREA-C) L'OREAL SA

COUNTRY COUNT: 13

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK L	A PG	MAIN IPC
EP 764437	A1 19970326	(199718)* F	 R 8[0]	
FR 2739023	A1 19970328	(199721) F	R 13[0]	
JP 09110651	A 19970428	(199727) J.	A 6[0]	
CA 2186151	A 19970322	(199730) F	R	
EP 764437	B1 19980408	(199818) F	R 11[0]	
DE 69600226	E 19980514	(199825) D	E	
JP 2756442	B2 19980525	(199826) J.	A 6	
ES 2117896	T3 19980816	(199839) E	S	
US 6024948	A 20000215	(200016) E	N	
CA 2186151	C 20020507	(200239) F	R	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 764437 A1 FR 2739023 A1 DE 69600226 E EP 764437 B1 DE 69600226 E ES 2117896 T3 JP 09110651 A JP 2756442 B2 CA 2186151 A		EP 1996-401831 FR 1995-11110 DE 1996-696002 EP 1996-401831 EP 1996-401831 JP 1996-248402 JP 1996-248402 CA 1996-218615	19960827 19950921 26 19960827 19960827 19960827 19960827 19960919
CA 2186151 C US 6024948 A		CA 1996-218615 US 1996-710858	***************************************

FILING DETAILS:

```
PATENT NO KIND
                                           PATENT NO
      _____
     DE 69600226 E Based on EP 764437 A
ES 2117896 T3 Based on EP 764437 A
JP 2756442 B2 Previous Publ JP 09110651 A
PRIORITY APPLN. INFO: <u>FR 1995-11110</u> 19950921
INT. PATENT CLASSIF.:
          MAIN: A61K007-06
 IPC RECLASSIF.:
                      A61K0008-00 [I,A]; A61K0008-00 [I,C];
                      A61K0008-02 [I,A]; A61K0008-02 [I,C];
                      A61K0008-04 [I,A]; A61K0008-04 [I,C];
                      A61K0008-30 [I,C]; A61K0008-31 [I,A];
                      A61K0008-33 [I,A]; A61K0008-34 [I,A]; A61K0008-35 [I,A]; A61K0008-37 [I,A];
                      A61K0008-72 [I,C]; <u>A61K0008-81</u> [I,A];
                      A61Q0005-00 [I,A]; A61Q0005-00 [I,C];
                      A61Q0005-06 [I,A]; A61Q0005-06 [I,C];
                      C09K0003-30 [I,A]; C09K0003-30 [I,C]
ECLA:
                      A61K0008-04F; A61K0008-33; A61K0008-34; A61K0008-81K4;
                     A61Q0005-06
                    424/070.160
USCLASS NCLM:
       NCLS:
                     424/070.100; 424/070.110
BASIC ABSTRACT:
           EP 764437 A1 UPAB: 20060113
           Compsn. for setting and/or styling the hair, comprising ina cosmetically
     acceptable aqueous medium at least one film forming acrylic oligomer which is
     soluble or dispersible in the medium and which has a mol. weight (by steric
     exclusion chromatography) of \leq 50,000 (500-45,000) and a Tg of 0-45 (10-35)°C.
     The oligomer is prepared by polymerisation of a monomer mixture comprising:
     (A) 20-45 weight % tert. butyl methacrylate, tert. butyl acrylate, isobutyl
     acrylate and mixts. of these, (B) 5-25 (8-15) weight % ethylenically
     unsaturated monomer(s) containing at least one carboxylic acid function and
     (C) at least one alkyl(1-4 C) acrylate other than tert. butyl acrylate in an
     amount sufficient to give an oligomer with a Tg of 0-45 °C.
           Pref. the carboxylic acid monomer (B) is chosen from ethylenically
     unsaturated monocarboxylic acids, ethylenically unsaturated dicarboxylic acids
     and their mono- ester and mono-amide derivs., partic. where (B) is
     (meth) acrylic acid.
           USE - In the formulation of hair sprays, hair lacquers, mousses, etc.,
     for dispensing from aerosol containers or spray pump bottles.
            ADVANTAGE - The acrylic oligomers can be dissolved in a
water/ethanol/dimethylether type medium to give low viscosity, high solids compsns.
with a maximum volatile organic cpd. content of 55 % which can be dispensed as a
spray or mousse with good diffusion during application, good holding power, fast
drying properties, good cosmetic properties of feel and combability, and easy
removal by washing.
MANUAL CODE:
                    CPI: A04-F01A; A04-F06E5; A12-V04A; D08-B05
Member(0002)
ABEQ FR 2739023 A1 UPAB 20060113
     Compsn. for setting and/or styling the hair, comprising ina
     cosmetically acceptable ag. medium at least one film
     forming acrylic oligomer which is soluble or dispersible in the medium and
     which has a mol. wt. (by steric exclusion chromatography) of \leq
     50,000 (500-45,000) and a Tg of 0-45 (10-35) °C. The oligomer is
     prepd. by polymerisation of a monomer mixt. comprising: (A) 20-45 wt. %
     tert. butyl methacrylate, tert. butyl acrylate,
```

isobutyl acrylate and mixts. of these, (B) 5-25 (8-15)

wt. % ethylenically unsaturated monomer(s) contq. at least one carboxylic

acid function and (C) at least one alkyl(1-4 C) acrylate other than tert. butyl acrylate in an amt. sufficient to give an oligomer with a Tg of $0-45\,^{\circ}\text{C}$.

Pref. the carboxylic acid monomer (B) is chosen from ethylenically unsaturated monocarboxylic acids, ethylenically unsaturated dicarboxylic acids and their mono- ester and mono-amide derivs., partic. where (B) is (meth)acrylic acid.

USE - In the formulation of hair sprays, hair lacquers, mousses, etc., for dispensing from aerosol containers or spray pump bottles.

ADVANTAGE - The acrylic oligomers can be dissolved in a water/ethanol/dimethylether type medium to give low
viscosity, high solids compsns. with a max. volatile organic cpd. content of 55 % which can be dispensed as a spray or mousse with good diffusion during application, good holding power, fast drying properties, good cosmetic properties of feel and combability, and easy removal by washing.

Member(0003)

ABEQ JP 09110651 A UPAB 20060113

Compsn. for setting and/or styling the hair, comprising ina cosmetically acceptable ag. medium at least one film forming acrylic oligomer which is soluble or dispersible in the medium and which has a mol. wt. (by steric exclusion chromatography) of \leq 50,000 (500-45,000) and a Tg of 0-45 (10-35) °C. The oligomer is prepd. by polymerisation of a monomer mixt. comprising: (A) 20-45 wt. % tert. butyl methacrylate, tert. butyl acrylate, isobutyl acrylate and mixts. of these, (B) 5-25 (8-15) wt. % ethylenically unsaturated monomer(s) contg. at least one carboxylic acid function and (C) at least one alkyl(1-4 C) acrylate other than tert. butyl acrylate in an amt. sufficient to give an oligomer with a Tg of 0-45°C.

Pref. the carboxylic acid monomer (B) is chosen from ethylenically unsaturated monocarboxylic acids, ethylenically unsaturated dicarboxylic acids and their mono- ester and mono-amide derivs., partic. where (B) is (meth)acrylic acid.

USE - In the formulation of hair sprays, hair lacquers, mousses, etc., for dispensing from aerosol containers or spray pump bottles.

ADVANTAGE - The acrylic oligomers can be dissolved in a water/ethanol/dimethylether type medium to give low viscosity, high solids compsns. with a max. volatile organic cpd. content of 55 % which can be dispensed as a spray or mousse with good diffusion during application, good holding power, fast drying properties, good commetic properties of feel and combability, and easy removal by washing.

Member (0005)

ABEQ EP 764437 B1 UPAB 20060113

Compsn. for setting and/or styling the hair, comprising ina cosmetically acceptable ag. medium at least one film forming acrylic oligomer which is soluble or dispersible in the medium and which has a mol. wt. (by steric exclusion chromatography) of \leq 50,000 (500-45,000) and a Tg of 0-45 (10-35) °C. The oligomer is prepd. by polymerisation of a monomer mixt. comprising: (A) 20-45 wt. % tert. butyl methacrylate, tert. butyl acrylate, isobutyl acrylate and mixts. of these, (B) 5-25 (8-15) wt. % ethylenically unsaturated monomer(s) contg. at least one carboxylic acid function and (C) at least one alkyl(1-4 C) acrylate other than tert. butyl acrylate in an amt. sufficient to give an oligomer with a Tg of 0-45°C.

Pref. the carboxylic acid monomer (B) is chosen from ethylenically

unsaturated monocarboxylic acids, ethylenically unsaturated dicarboxylic acids and their mono- ester and mono-amide derivs., partic. where (B) is (meth)acrylic acid.

USE - In the formulation of hair sprays, hair lacquers, mousses, etc., for dispensing from aerosol containers or spray pump bottles.

ADVANTAGE - The acrylic oligomers can be dissolved in a water/ethanol/dimethylether type medium to give low viscosity, high solids compsns. with a max. volatile organic cpd. content of 55 % which can be dispensed as a spray or mousse with good diffusion during application, good holding power, fast drying properties, good cosmetic properties of feel and combability, and easy removal by washing.

Member (0007)

ABEQ JP 2756442 B2 UPAB 20060113

Compsn. for setting and/or styling the hair, comprising ina cosmetically acceptable ag. medium at least one film forming acrylic oligomer which is soluble or dispersible in the medium and which has a mol. wt. (by steric exclusion chromatography) of \leq 50,000 (500-45,000) and a Tg of 0-45 (10-35)°C. The oligomer is prepd. by polymerisation of a monomer mixt. comprising: (A) 20-45 wt. % tert. butyl methacrylate, tert. butyl acrylate, isobutyl acrylate and mixts. of these, (B) 5-25 (8-15) wt. % ethylenically unsaturated monomer(s) contg. at least one carboxylic acid function and (C) at least one alkyl(1-4 C) acrylate other than tert. butyl acrylate in an amt. sufficient to give an oligomer with a Tg of 0-45°C. Pref. the carboxylic acid monomer (B) is chosen from ethylenically

Pref. the carboxylic acid monomer (B) is chosen from ethylenically unsaturated monocarboxylic acids, ethylenically unsaturated dicarboxylic acids and their mono- ester and mono-amide derivs., partic. where (B) is (meth)acrylic acid.

USE - In the formulation of hair sprays, hair lacquers, mousses, etc., for dispensing from aerosol containers or spray pump bottles.

ADVANTAGE - The acrylic oligomers can be dissolved in a water/ethanol/dimethylether type medium to give low viscosity, high solids compsns. with a max. volatile organic cpd. content of 55 % which can be dispensed as a spray or mousse with good diffusion during application, good holding power, fast drying properties, good cosmetic properties of feel and combability, and easy removal by washing.

Member (0009)

ABEQ US 6024948 A UPAB 20060113

Compsn. for setting and/or styling the hair, comprising ina cosmetically acceptable ag. medium at least one film forming acrylic oligomer which is soluble or dispersible in the medium and which has a mol. wt. (by steric exclusion chromatography) of \leq 50,000 (500-45,000) and a Tg of 0-45 (10-35) °C. The oligomer is prepd. by polymerisation of a monomer mixt. comprising: (A) 20-45 wt. % tert. butyl methacrylate, tert. butyl acrylate, isobutyl acrylate and mixts. of these, (B) 5-25 (8-15) wt. % ethylenically unsaturated monomer(s) contg. at least one carboxylic acid function and (C) at least one alkyl(1-4 C) acrylate other than tert. butyl acrylate in an amt. sufficient to give an oligomer with a Tg of 0-45°C.

Pref. the carboxylic acid monomer (B) is chosen from ethylenically unsaturated monocarboxylic acids, ethylenically unsaturated dicarboxylic acids and their mono- ester and mono-amide derivs., partic. where (B) is (meth)acrylic acid.

USE - In the formulation of hair sprays, hair lacquers, mousses,

etc., for dispensing from aerosol containers or spray pump bottles.

ADVANTAGE - The acrylic oligomers can be dissolved in a water/ethanol/dimethylether type medium to give low viscosity, high solids compsns. with a max. volatile organic cpd. content of 55 % which can be dispensed as a spray or mousse with good diffusion during application, good holding power, fast drying properties, good cosmetic properties of feel and combability, and easy removal by washing.

L271 ANSWER 49 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1996-277445 [28] WPIX

DOC. NO. CPI: C1996-087988 [28]

TITLE: Oral environment hard tissue surface coating for plaque

resistance - comprises polymer of repeating units of

polar or polarisable gp., modulating

gp. and hydrophobic fluorine-containing gp., for stain

resistance

DERWENT CLASS: A14; A96; D21; G02

INVENTOR: KEDROWSKI B L; MITRA S B; ROZZI S M; SHELBURNE C E

PATENT ASSIGNEE: (MINN-C) MINNESOTA MINING & MFG CO

COUNTRY COUNT: 65

PATENT INFORMATION:

PAT	TENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC	
WO	9616630	A1	19960606	(199628)*	EN	52[0]		<
AU	9642445	Α	19960619	(199640)	EN			<
US	5662887	Α	19970902	(199741)	EN	11[0]		<
ΕP	794756	A1	19970917	(199742)	EN	[0]		<
JΡ	10510531	W	19981013	(199851)	JA	48		<

APPLICATION DETAILS:

Ρ.	ATENT NO	KIND	APF	PLICATION	DATE
W	 O 9616630 A1		WO	1995-US1531	7 19951122
U	S 5662887 A		US	1994-347717	19941201
E	P 794756 A1		EP	1995-940822	19951122
E	P 794756 A1		WO	1995-US1531	7 19951122
J	P 10510531 W		WO	1995-US1531	7 19951122
Α	U 9642445 A		AU	1996-42445 [L9951122
J	P 10510531 W			1996-518952	

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9642445 A	Based on	WO 9616630 A
EP 794756 A1	Based on	WO 9616630 A
JP 10510531 W	Based on	WO 9616630 A

PRIORITY APPLN. INFO: US 1994-347717 19941201

INT. PATENT CLASSIF.:

MAIN: A61K006-02

IPC RECLASSIF.: A23G0004-00 [I,A]; A23G0004-00 [I,C]; A61K0006-00 [I,A];

A61K0006-00 [I,C]; A61K0006-02 [I,A]; A61K0006-02 [I,C];

A61K0006-083 [I,A]; <u>A61K0008-72</u> [I,C]; A61K0008-81 [I,A]; A61Q0011-00 [I,A];

A61Q0011-00 [I,C]

ECLA: A23G0004-06; A61K0006-00; A61K0006-02; A61K0006-083G;

A61K0008-81K4; A61Q0011-00

USCLASS NCLM: BASIC ABSTRACT: 424/049.000

WO 1996016630 A1 UPAB: 20050512

A coating comprises polymer comprising repeating units:

- (i) 1-80 weight% of a polar or polarisable gp.;
- (ii) 0-98 weight% of a modulating gp.; and
- (iii) 1-40% of a hydrophobic fluorine-containing gp.

The coating has a Wilhelmy Balance Test Advancing Contact Angle greater than 55 $^{\circ}\boldsymbol{.}$

Also claimed are:

- (1) a dental compsn. suitable for coating a temporary or permanent dental restorative having the above polymer coating;
 - (2) an orthodontic device having the above polymer coating;
 - (3) a prosthodontic device having the above polymer coating;
- (4) a method of reducing adhesion of plaque, bacteria and stain to intra-oral surfaces;
 - (5) a method of reducing adhesion of bacteria to intra-oral surfaces by:
 - (a) applying the above polymer compsn.;
 - (b) allowing the coating to dry; and
- (c) applying a second compsn. comprising a surfactant to the coated surface;
- (6) a method for coating oral surfaces of the mouth of a human comprising:
 - (a) mixing monomers (i), (ii) and (iii) in appropriate ratios; and
- (b) polymerising the monomers in situ on the oral surface to form the coating;
- (7) a kit for applying a restoration to the tooth in need of the treatment comprising a dental restoration material and the above polymer compsn.;
- (8) a dental compsn. suitable for coating human oral surfaces comprising the above polymer compsn. and additionally containing silane moiety capable of undergoing a condensation reaction;
 - (9) a dental compsn. suitable for coating a human oral surface;
- (10) a coating on hard tissue surfaces or surfaces of the oral environment;
- (11) a temporary or permanent dental restorative having a coating made from the above polymer compsn. which additionally contains silane moiety capable of undergoing condensation reaction;
- (12) an orthodontic device having a coating comprising the above polymer compsn. which additionally contains silane moiety capable of undergoing condensation reaction;
- (13) a method for reducing adhesion of bacteria to intra-oral surfaces comprising:
- (a) applying the above polymer compsn. additionally containing silane moiety capable of undergoing condensation reaction, and
 - (b) allowing it to dry on the surface;
- (14) a method for reducing adhesion of bacteria to intra-oral surfaces comprising:
- (i) applying the above polymer compsn. additionally containing a silane moiety capable of undergoing condensation reaction, and
 - (ii) allowing the compsn. to dry on the surface, and
- (iii) applying a second compsn. containing a surfactant to the coated surface;
- (15) a method for reducing adhesion of bacteria to intra-oral surfaces adjacent to orthodontic devices comprising:
 - (a) adhering the device to the tooth surface,
- (b) applying the polymer compsn. additionally containing a silane moiety capable of undergoing condensation reaction to the oral surface, and

- (c) allowing the polymer to dry on the intra-oral surface; and
- (16) a kit for applying a restoration to a tooth in need of the treatment comprising a dental restoration material and the polymer compsn. additionally containing silane moiety capable of undergoing condensation reaction.

USE - Used for hard tissue surfaces or surfaces of the oral environment.

ADVANTAGE - The coatings have low frictional coefficients and high resistance to plaque, bacteria, food stains, etc. When the surface having the coating is treated with a compsn. comprising a surfactant, enhanced resistance to bacteria and proteinaceous substances is observed. The polymer coatings exhibit high resistance to abrasion encountered during tooth brushing. CPI: A04-E10; A12-V02B; A12-V04B; D08-A03; G02-A05

Member(0005)

MANUAL CODE:

ABEQ JP 10510531 W UPAB 20050512

A coating comprises polymer comprising repeating units:

- (i) 1-80 wt.% of a polar or polarisable gp.;
- (ii) 0-98 wt.% of a modulating gp.; and
- (iii) 1-40% of a hydrophobic fluorine-contg. gp.

The coating has a Wilhelmy Balance Test Advancing Contact Angle greater than 55 $^{\circ}$.

Also claimed are:

- (1) a dental compsn. suitable for coating a temporary or permanent dental restorative having the above polymer coating;
- (2) an orthodontic device having the above polymer coating;
- (3) a prosthodontic device having the above polymer coating;
- (4) a method of reducing adhesion of plaque, bacteria and stain to intra-oral surfaces;
- (5) a method of reducing adhesion of bacteria to intra-oral surfaces by:
- (a) applying the above polymer compsn.;
- (b) allowing the coating to dry; and
- (c) applying a second compsn. comprising a surfactant to the coated surface;
- (6) a method for coating oral surfaces of the mouth of a human comprising:
- (a) mixing monomers (i), (ii) and (iii) in appropriate ratios; and
- (b) polymerising the monomers in situ on the oral surface to form the coating;
- (7) a kit for applying a restoration to the tooth in need of the treatment comprising a dental restoration material and the above polymer compsn.;
- (8) a dental compsn. suitable for coating human oral surfaces comprising the above polymer compsn. and additionally contq. silane moiety capable of undergoing a condensation reaction;
- (9) a dental compsn. suitable for coating a human oral surface;
- (10) a coating on hard tissue surfaces or surfaces of the oral environment;
- (11) a temporary or permanent dental restorative having a coating made from the above polymer compsn. which additionally contains silane moiety capable of undergoing condensation reaction;
- (12) an orthodontic device having a coating comprising the above polymer compsn. which additionally contains silane moiety capable of undergoing condensation reaction;
- (13) a method for reducing adhesion of bacteria to intra-oral surfaces comprising:
- (a) applying the above polymer compsn. additionally contg. silane moiety capable of undergoing condensation reaction, and
- (b) allowing it to dry on the surface;
- (14) a method for reducing adhesion of bacteria to intra-oral surfaces comprising:
- (i) applying the above polymer compsn. additionally contq. a silane moiety capable of undergoing condensation reaction, and

- (ii) allowing the compsn. to dry on the surface, and
- (iii) applying a second compsn. contq. a surfactant to the coated surface;
- (15) a method for reducing adhesion of bacteria to intra-oral surfaces adjacent to orthodontic devices comprising:
- (a) adhering the device to the tooth surface,
- (b) applying the polymer compsn. additionally contg. a silane moiety capable of undergoing condensation reaction to the oral surface, and
- (c) allowing the polymer to dry on the intra-oral surface; and
- (16) a kit for applying a restoration to a tooth in need of the treatment comprising a dental restoration material and the polymer compsn. additionally contg. silane moiety capable of undergoing condensation reaction.

 $\ensuremath{\mathsf{USE}}$ - $\ensuremath{\mathsf{Used}}$ for hard tissue surfaces or surfaces of the oral environment.

ADVANTAGE - The coatings have low frictional coefficients and high resistance to plaque, bacteria, food stains, etc. When the surface having the coating is treated with a compsn. comprising a surfactant, enhanced resistance to bacteria and proteinaceous substances is observed. The polymer coatings exhibit high resistance to abrasion encountered during tooth brushing.

L271 ANSWER 50 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1996-180876 [19] WPIX

CROSS REFERENCE: 2002-019227

DOC. NO. CPI: C1996-057086 [19]

TITLE: Aqueous hair styling compsns. containing low amts. of

volatile organic cpds. - comprises acrylic hair fixative

resin, soluble plasticising cpd(s). comprising

poly:carboxylic acid ester or di:methicone co:poly:ol, water, and opt. insoluble polyester hair fixative resin, and have good tack and curl retention, etc.

DERWENT CLASS: A14; A25; A96; D21

INVENTOR: SCHWARTZ C

PATENT ASSIGNEE: (ROHM-C) ROHM & HAAS CO; (SCHW-I) SCHWARTZ C

COUNTRY COUNT: 17

PATENT INFORMATION:

PAT	TENT NO	KINI	O DATE	WEEK	LA	PG	MAIN IPC	
EP	705595	A2	19960410	(199619)*	EN	 18[0]		<
CA	2158718	Α	19960404	(199629)	EN			<
ZA	9508301	Α	19960626	(199631)	EN	27[0]		<
BR	9504258	Α	19961022	(199648)	PΤ			<
JP	08301735	A	19961119	(199705)	JA	19[0]		<
EP	705595	A3	19970618	(199737)	EN			<
US	5658558	Α	19970819	(199739)	EN	13[0]		<
US	5939058	A	19990817	(199939)	EN			<
MX	195545	В	20000315	(200123)	ES			<
EP	705595	В1	20020605	(200238)	EN			<
DE	69526896	E	20020711	(200253)	DE			<
JΡ	2005306889	Α	20051104	(200572)	JA	35		
JΡ	3720095	В2	20051124	(200577)	JA	34		
JΡ	2005343901	Α	20051215	(200582)	JA	35		
JP	3854982	В2	20061206	(200680)	JA	35		
JP	3942622	В2	20070711	(200747)	JA	35		

APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE

```
EP 705595 A2
                                                        EP 1995-306789 19950926
       US 5658558 A CIP of
                                                        US 1994-316008 19941003
                                                       US 1994-316008 19941003
       US 5939058 A CIP of
                                                       US 1995-437449 19950508
US 1995-437449 19950508
CA 1995-2158718 19950920
DE 1995-626896 19950926
       US 5658558 A
       US 5939058 A Div Ex
       CA 2158718 A
       DE 69526896 E
       EP 705595 A3
                                                        EP 1995-306789 19950926
       EP 705595 B1
                                                        EP 1995-306789 19950926
       DE 69526896 E
                                                        EP 1995-306789 19950926
                                                       MX 1995-4137 19950928
BR 1995-4258 19951002
       MX 195545 B
       BR 9504258 A
                                                       <u>JP 1995-278277 19951003</u>
JP 1995-278277 19951003
       JP 08301735 A
       JP 2005306889 A Div Ex
                                                       JP 1995-278277 19951003
       JP 3720095 B2
       JP 2005343901 A Div Ex
                                                       JP 1995-278277 19951003
                                                        JP 1995-278277 19951003
       JP 3854982 B2 Div Ex
                                                        ZA 1995-8301 19951003
US 1997-838220 19970403
       ZA 9508301 A
       US 5939058 A
       EP 705595 B1 Related to

EP 2001-112371 19950926

JP 2005306889 A

JP 2005-212043 20050722

JP 2005343901 A

JP 2005-212049 20050722

JP 3854982 B2

JP 2005-212049 20050722

JP 3942622 B2 Div Ex

JP 1995-278277 19951003
                                                       JP 2005-212043 20050722
       JP 3942622 B2
FILING DETAILS:
       PATENT NO KIND
                                                       PATENT NO
       EP 705595 B1 Related to EP 1142554 A
DE 69526896 E Based on EP 705595 A
JP 3720095 B2 Previous Publ JP 8301735 A
JP 3854982 B2 Previous Publ JP 2005343901 A
US 5939058 A Div ex US 5658558 A
JP 3942622 B2 Previous Publ JP 2005306889 A
                              5 1995-437449 19950508
US 1994-316008 19941003
PRIORITY APPLN. INFO: US 1995-437449
                               US 1997-838220 19970403
INT. PATENT CLASSIF.:
      MAIN: A61K007-006; A61K007-06
      SECONDARY:
                          A61K007-011
                           A61K0008-30 [I,C]; A61K0008-44 [I,A];
   IPC ORIGINAL:
                            A61K0008-72 [I,C]; A61K0008-81 [I,A];
                            A61K0008-85 [I,A]; A61K0008-891 [I,A];
                            A61Q0005-06 [I,A]; A61Q0005-06 [I,C]
 IPC RECLASSIF.:
                            A61K0008-00 [I,A]; A61K0008-00 [I,C];
                            A61K0008-30 [I,C]; A61K0008-37 [I,A];
                            A61K0008-39 [I,A]; A61K0008-44 [I,A];
                            A61K0008-60 [I,A]; A61K0008-72 [I,C];
                            A61K0008-81 [I,A]; A61K0008-85 [I,A];
                            A61K0008-86 [I,A]; A61K0008-89 [I,A];
                            A61K0008-891 [I,A]; A61K0008-894 [I,A]; A61K0008-898 [I,A]; A61K0008-92 [I,A];
                            A61K0008-92 [I,C]; A61K0008-96 [I,C];
                            A61K0008-97 [I,A]; A61Q0005-00 [I,A];
                            A61Q0005-00 [I,C]; A61Q0005-06 [I,A];
                            A61Q0005-06 [I,C]; A61Q0007-02 [I,A];
```

<u>A6100007-02</u> [I,C]; C08L0083-00 [I,C]; C08L0083-04

ECLA: A61K0008-37; A61K0008-44; A61K0008-81K4; A61K0008-81K6;

A61K0008-85; A61K0008-86; A61K0008-891; A61K0008-894;

A61Q0005-00; A61Q0005-06; A61Q0007-02

USCLASS NCLM: 424/070.160

NCLS: 424/047.000; 424/070.110; 424/070.120; 514/970.000

BASIC ABSTRACT:

EP 705595 A2 UPAB: 20060131

Aqueous hair styling compsn. comprises: (a) 1-15 weight% of acrylic hair fixative resin(s) comprising: (1) 5-95 (especially 45-90) weight% of 1-8C alkyl(meth)acrylate monomers; (2) 2-70 (especially 2-26) weight% of hydroxyalkyl(meth)acrylate monomers; (3) 2-50 (especially 2-30) weight% of 3-8C monoethylenically unsaturated monocarboxylic acid monomer, based on the total weight of the monomer; (b) opt. up to 10 (especially when present 1-7) weight% of insoluble polyester hair fixative resin(s); (c) 0.01-1 weight% of soluble plasticising cpd(s). comprising a polycarboxylic acid ester or dimethicone copolyol; (d) water; and (e) no more than 70 (especially no more than 55) weight% of volatile organic cpd(s).

Also claimed are: (1) <u>aqueous</u> hair styling compsn. comprising: (a) 1-15 weight% of acrylic hair fixative resin(s); (b) 0.01-1 weight% of soluble surface tension reducing cpd(s); (c) 0.0001-0.5 weight% of simethicone(s); (d) water; and (e) no more than 70 (especially no more than 55) weight% of volatile organic cpd(s).; (2) aqueous hair styling compsn. comprising iodopropynyl-butyl-carbamate, water and 1-60 weight% of acrylic hair fixative resin(s) described above; (3) method of plasticising the acrylic hair fixative resin in an aq. hair styling compsn. by adding to the compsn. the polycarboxylic acid ester and/or dimethicone copolyol; (4) method for reducing beading on hair from <u>aqueous</u> hair styling compsn. claimed in (1), applied to the hair by a spray, by adding to the compsn. simethicone(s); and (5) method of inhibiting microbial growth in <u>aqueous</u> hair styling compsn. by adding iodopropynyl-butyl-carbamate to the compsn.

ADVANTAGE - The hair fixative resin/plasticiser system results in flexible resins which still have good tack, curl retention, and drying time properties when used in the low volatile organic cpd. (VOC) containing compsn. Simethicone cpds., when added to the agueous styling compsn., reduce beading on hair and addition of iodo-propynyl-butyl- carbamate to the agueous compsn. inhibits microbial growth in the compsn(CLAIMED). The compsns. containing the various additives still provide good hair styling benefits.

Aq. hair styling compsn. comprises: (a) 1-15 wt.% of acrylic

CPI: A04-F06E5; A05-E01D; A06-A00E3; A12-V04A; D08-B05

Member (0003)

MANUAL CODE:

ABEQ ZA 9508301 A UPAB 20060131

hair fixative resin(s) comprising: (1) 5-95 (esp. 45-90) wt.% of 1-8C alkyl(meth)acrylate monomers; (2) 2-70 (esp. 2-26) wt.% of hydroxyalkyl(meth)acrylate monomers; (3) 2-50 (esp. 2-30) wt.% of 3-8C monoethylenically unsaturated monocarboxylic acid monomer, based on the total wt. of the monomer; (b) opt. up to 10 (esp. when present 1-7) wt.% of insoluble polyester hair fixative resin(s); (c) 0.01-1 wt.% of soluble plasticising cpd(s). comprising a polycarboxylic acid ester or dimethicone copolyol; (d) water; and (e) no more than 70 (esp. no more than 55) wt.% of volatile organic cpd(s). Also claimed are: (1) ag. hair styling compsn. comprising: (a) 1-15 wt.% of acrylic hair fixative resin(s); (b) 0.01-1 wt.% of soluble surface tension reducing cpd(s); (c) 0.0001-0.5 wt.% of simethicone(s); (d) water; and (e) no more than 70 (esp. no more than 55) wt.% of volatile organic cpd(s).; (2) aq. hair styling compsn. comprising iodo-propynyl-butyl-carbamate, water and 1-60 wt.% of acrylic hair fixative resin(s) described above; (3) method of plasticising

the acrylic hair fixative resin in an ag. hair styling compsn. by adding to the compsn. the polycarboxylic acid ester and/or dimethicone copolyol; (4) method for reducing beading on hair from ag. hair styling compsn. claimed in (1), applied to the hair by a spray, by adding to the compsn. simethicone(s); and (5) method of inhibiting microbial growth in ag. hair styling compsn. by adding iodo-propynyl-butyl-carbamate to the compsn.

ADVANTAGE - The hair fixative resin/plasticiser system results in flexible resins which still have good tack, curl retention, and drying time properties when used in the low volatile organic cpd. (VOC) contg. compsn. Simethicone cpds., when added to the ag. styling compsn., reduce beading on hair and addn. of iodo-propynyl-butyl-carbamate to the ag. compsn. inhibits microbial growth in the compsn(CLAIMED). The compsns. contg. the various additives still provide good hair styling benefits.

Member (0005)

ABEQ JP 08301735 A UPAB 20060131

Aq. hair styling compsn. comprises: (a) 1-15 wt.% of acrylic hair fixative resin(s) comprising: (1) 5-95 (esp. 45-90) wt.% of 1-8C alkyl(meth)acrylate monomers; (2) 2-70 (esp. 2-26) wt.% of hydroxyalkyl(meth)acrylate monomers; (3) 2-50 (esp. 2-30) wt.% of 3-8C monoethylenically unsaturated monocarboxylic acid monomer, based on the total wt. of the monomer; (b) opt. up to 10 (esp. when present 1-7) wt.% of insoluble polyester hair fixative resin(s); (c) 0.01-1 wt.% of soluble plasticising cpd(s). comprising a polycarboxylic acid ester or dimethicone copolyol; (d) water; and (e) no more than 70 (esp. no more than 55) wt.% of volatile organic cpd(s). Also claimed are: (1) aq. hair styling compsn. comprising: (a) 1-15 wt.% of acrylic hair fixative resin(s); (b) 0.01-1 wt.% of soluble surface tension reducing cpd(s); (c) 0.0001-0.5 wt.% of simethicone(s); (d) water; and (e) no more than 70 (esp. no more than 55) wt.% of volatile organic cpd(s).; (2) aq. hair styling compsn. comprising iodo-propynyl-butyl-carbamate, water and 1-60 wt.% of acrylic hair fixative resin(s) described above; (3) method of plasticising the acrylic hair fixative resin in an aq. hair styling compsn. by adding to the compsn. the polycarboxylic acid ester and/or dimethicone copolyol; (4) method for reducing beading on hair from ag. hair styling compsn. claimed in (1), applied to the hair by a spray, by adding to the compsn. simethicone(s); and (5) method of inhibiting microbial growth in $\underline{\text{ag.}}$ hair styling compsn. by adding iodo-propynyl-butyl-carbamate to the compsn.

ADVANTAGE - The hair fixative resin/plasticiser system results in flexible resins which still have good tack, curl retention, and drying time properties when used in the low volatile organic cpd. (VOC) contg. compsn. Simethicone cpds., when added to the ag. styling compsn., reduce beading on hair and addn. of iodo-propynyl-butyl-carbamate to the ag. compsn. inhibits microbial growth in the compsn(CLAIMED). The compsns. contg. the various additives still provide good hair styling benefits.

Member (0008)

ABEQ US 5939058 A UPAB 20060131

Ag. hair styling compsn. comprises: (a) 1-15 wt.% of acrylic hair fixative resin(s) comprising: (1) 5-95 (esp. 45-90) wt.% of 1-8C alkyl(meth)acrylate monomers; (2) 2-70 (esp. 2-26) wt.% of hydroxyalkyl(meth)acrylate monomers; (3) 2-50 (esp. 2-30) wt.% of 3-8C monoethylenically unsaturated monocarboxylic acid monomer, based on the total wt. of the monomer; (b) opt. up to 10 (esp. when present 1-7) wt.% of insoluble polyester hair fixative resin(s); (c) 0.01-1 wt.% of soluble

plasticising cpd(s). comprising a polycarboxylic acid ester or dimethicone copolyol; (d) water; and (e) no more than 70 (esp. no more than 55) wt.% of volatile organic cpd(s). Also claimed are: (1) ag. hair styling compsn. comprising: (a) 1-15 wt.% of acrylic hair fixative resin(s); (b) 0.01-1 wt.% of soluble surface tension reducing cpd(s); (c) 0.0001-0.5 wt.% of simethicone(s); (d) water; and (e) no more than 70 (esp. no more than 55) wt.% of volatile organic cpd(s).; (2) aq. hair styling compsn. comprising iodo-propynyl-butyl-carbamate, water and 1-60 wt.% of acrylic hair fixative resin(s) described above; (3) method of plasticising the acrylic hair fixative resin in an aq. hair styling compsn. by adding to the compsn. the polycarboxylic acid ester and/or dimethicone copolyol; (4) method for reducing beading on hair from ag. hair styling compsn. claimed in (1), applied to the hair by a spray, by adding to the compsn. simethicone(s); and (5) method of inhibiting microbial growth in aq. hair styling compsn. by adding iodo-propynyl-butyl-carbamate to the compsn.

ADVANTAGE - The hair fixative resin/plasticiser system results in flexible resins which still have good tack, curl retention, and drying time properties when used in the low volatile organic cpd. (VOC) contg. compsn. Simethicone cpds., when added to the ag. styling compsn., reduce beading on hair and addn. of iodo-propynyl-butyl-carbamate to the ag. compsn. inhibits microbial growth in the compsn(CLAIMED). The compsns. contg. the various additives still provide good hair styling benefits.

L271 ANSWER 51 OF 84 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1995-231233 [30] WPIX

CROSS REFERENCE: 1999-142000; 1999-189438; 1999-243163; 2001-513666;

2003-800889

DOC. NO. CPI: C1995-106686 [30]

TITLE: Opt. crosslinkable oral coatings or tooth:pastes -

comprising polar (co)polymer containing hydrophobic

graft polysiloxane chain

DERWENT CLASS: A14; A26; A96; D21; E19; P34

INVENTOR: KEDROWSKI B L; MITRA S B; ROZZI S M; SHELBURNE C E

PATENT ASSIGNEE: (MINN-C) MINNESOTA MINING & MFG CO

COUNTRY COUNT: 57

PATENT INFORMATION:

PAT	CENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
WO	9515740	A1	19950615	(199530)*	EN	99[4]	
AU	9512645	A	19950627	(199541)	ΕN		
ZA	9409668	А	19960828	(199639)	ΕN	96	
EP	732911	A1	19960925	(199643)	ΕN	[0]	
JP	09506104	W	19970617	(199734)	JA	92[0]	
BR	9408282	A	19970826	(199740)	PΤ		
AU	9916435	А	19990429	(199928)	ΕN		
AU	724351	В	20000921	(200050)#	ΕN		
CN	1142762	А	19970212	(200050)	ZH		
RU	2164400	C2	20010327	(200130)	RU		
MX	201136	В	20010329	(200226)	ES		
EP	732911	В1	20030319	(200325)	ΕN		
DE	69432310	E	20030424	(200335)	DE		
JP	2006348047	A	20061228	(200703)	JA	73	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
WO 9515740 A1 BR 9408282 A CN 1142762 A DE 69432310 E EP 732911 A1 JP 09506104 W BR 9408282 A RU 2164400 C2 EP 732911 B1 DE 69432310 E ZA 9409668 A MX 201136 B AU 9512645 A AU 9916435 A Di AU 724351 B Div EP 732911 B1 DE 69432310 E JP 09506104 W RU 2164400 C2 AU 9916435 A AU 724351 B JP 2006348047 A JP 2006348047 A	v Ex Ex Div Ex	WO 1994-US13848 19941202 BR 1994-8282 19941202 CN 1994-194930 19941202 DE 1994-632310 19941202 WO 1994-US13848 19941202 ZA 1994-9688 19941205 MX 1994-9688 19941205 AU 1995-12645 19941202 AU 1995-12645 19941202 EP 1995-903664 19941202 EP 1995-903664 19941202 EP 1995-903664 19941202 EP 1995-516241 19941202 AU 1999-16435 19990212 AU 1999-16435 19990212 AU 1995-516241 19941202 JP 1995-516241 19941202
FILING DETAILS:		
PATENT NO	KIND	PATENT NO
AU 724351 B DE 69432310 E AU 9512645 A EP 732911 A1 JP 09506104 W BR 9408282 A RU 2164400 C2	Previous Publ Based on	AU 9916435 A EP 732911 A WO 9515740 A WO 9515740 A WO 9515740 A WO 9515740 A
PRIORITY APPLN. INFO:		19931206
INT. PATENT CLASSIF.: MAIN: SECONDARY: IPC ORIGINAL: IPC RECLASSIF.:	A61K031-74; A61K006- A61K006-00; A61K007- A61K0006-02 [I,C]; A A61K0008-72 [I,C]; A A6100011-00 [I,A]; A A61K0006-02 [I,A]; A A61K0006-093 [I,A];	-16; C08F030-08 -61K0006-083 [I,A]; -61K0008-91 [I,A]; -61G00011-00 [I,C] -61K0006-02 [I,C]; A61K0006-083 [I,A]; -A61K0008-00 [I,A];
	A61K0008-00 [I,C]; A A61K0008-34 [I,A]; A A61K0008-36 [I,A]; A A61K0008-37 [I,A]; A A61K0008-49 [I,A]; A A61K0008-72 [I,C]; A A61K0008-91 [I,A]; A [I,C]; A61Q0011-00	61K0008-35 [I,A]; 61K0008-368 [I,A]; 61K0008-46 [I,A]; 61K0008-58 [I,A]; 61K0008-89 [I,A]; A61K0008-892 [I,A]; 61K0009-70 [I,A]; A61K0009-70

```
[I,C]; C08L0083-00 [I,C]; C08L0083-08 [I,A]; C09D0133-08 [I,A]; C09D0133-08 [I,C]; C09D0133-10 [I,A]; C09D0133-24 [I,A]; C09D0133-24 [I,C]; C09D0133-26 [I,A]; C09D0183-04 [I,A]; C09D0183-04 [I,C] A61K0006-02; A61K0006-083; A61K0006-083G; A61K0006-093; A61K0008-895; A61Q0011-00
```

ECLA:

BASIC ABSTRACT:

WO 1995015740 A1 UPAB: 20060110

A coating for hard tissue or for surfaces of the oral environment comprises a polymer with the following repeat units: (A) 1-80 weight% polar(or polarisable)gp.; (B) 0-98 weight% modulating gp.; and (C) 1-40 weight% hydrophobic graft polysiloxane chain of mol. weight at least 500. The polymer opt. also contains pendent crosslinkable (pref. ethylenically unsatd. or epoxy) gps. and/or one or more silane moieties capable of undergoing a condensn. reaction. Opt. also present in the coating is an ethylenically unsatd. cpd. Coating of the oral surface can be effected by in situ Polymerisation of a suitable monomer mixture.

Pref. (A) is derived from a mono- or multi-functional carboxyl gp.containing monomer, especially (meth)acrylic acid, itaconic acid, N-acryloyl
glycine, or mono- or multi-functional hydroxyl gp.-containing monomer,
especially hydroxy-ethyl, -propyl or- Bu (meth)acrylate, glycerol- or
pentaerythritol-mono(meth)acrylate, tris (hydroxymethyl)ethane monoacrylate,
N-hydroxymethyl(meth)acrylamide, hydroxy-ethyl or -propyl (meth)acrylamide or
alkoxy-substd. (meth)acrylates or (meth)acrylamides, or (un)substd. ammonium
monomers of formula CH2=C2COLR3(N+R4R5R6)dQ- (I). R2 = H, Me, Et, CN, carboxy
or carboxymethyl; d = 1-5; G = a bond or 1-12C hydrocarbyl linking gp. opt.
substd. and/or interrupted by an opt. substd. heteroatom; L = O or NH; R3 = 112C hydrocarbyl linking gp.; R4 and R5 = H or 1-12C alkyl or together form 2
carbo- or hetero-cyclic gp.; R6 = H or 1-30C alkyl; and Q = (in)organic anion.

(C) is derived from a monomer of formulae X(Y) nSi(R) 3-mZm (II), XC(0) (CH2) f(0) gSi(R) 3-mZm (III), (IV)-(VII). X = a vinyl gp. especially CHCR7)=C(R8)-where R7 = H or COOYH and R8 = H, Me or CH2COOH; Y = divalent linking gp.; n = 0 or 1; m = 1, 2 or 3; R and R' = H or lower alkyl; Z = monovalent siloxane polymeric moiety of Mn above 500; f = 2-6; g = 0 or 1; and h = 0, 1 or 2.

USE - In temporary or permanent dental restoratives, coatings for ortho- or prostho-dontic devices, coatings for reduction of adhesion of plaque, bacteria and strains and, with surfactant(s), as a toothpaste (all claimed). MANUAL CODE: CPI: A06-A00E3; A12-V02B; A12-V04B; D08-A05; E07-A02D; E10-A09A; E10-C04L; E10-E04; E10-G02G; E10-H01D; E10-H01E

Member (0003)

ABEQ ZA 9409668 A UPAB 20060110

A coating for hard tissue or for surfaces of the oral environment comprises a polymer with the following repeat units: (A) 1-80 wt.% polar(or polarisable)gp.; (B) 0-98 wt.% modulating qp.; and (C) 1-40 wt.% hydrophobic graft polysiloxane chain of mol. wt. at least 500. The polymer opt. also contains pendent crosslinkable (pref. ethylenically unsatd. or epoxy) gps. and/or one or more silane moieties capable of undergoing a condensn. reaction. Opt. also present in the coating is an ethylenically unsatd. cpd. Coating of the oral surface can be effected by in situ Polymerisation of a suitable monomer mixt.. Pref. (A) is derived from a mono- or multi-functional carboxyl gp.-contg. monomer, esp. (meth)acrylic acid, itaconic acid, N-acryloyl glycine, or mono- or multi-functional hydroxyl gp.-contg. monomer, esp. hydroxy-ethyl, -propyl or- Bu (meth)acrylate, glycerol- or pentaerythritol-mono(meth)acrylate, tris (hydroxymethyl)ethane monoacrylate, N-hydroxymethyl (meth) acrylamide, hydroxy-ethyl or -propyl (meth)acrylamide or alkoxy-substd. (meth)acrylates or (meth)acrylamides, or (un)substd. ammonium monomers of formula CH2=C2COLR3(N+R4R5R6)dQ- (I).

R2 = H, Me, Et, CN, carboxy or carboxymethyl; d = 1-5; G = a bond or 1-12C hydrocarbyl linking gp. opt. substd. and/or interrupted by an opt. substd. heteroatom; L = O or NH; R3 = 1-12C hydrocarbyl linking gp.; R4 and R5 = H or 1-12C alkyl or together form 2 carbo- or hetero-cyclic gp.; R6 = H or 1-30C alkyl; and Q = (in)organic anion.

(C) is derived from a monomer of formulae $X(Y) \, n \, Si(R) \, 3 - m \, Zm$ (II), $XC(O) \, (CH2) \, f(O) \, g \, Si(R) \, 3 - m \, Zm$ (III), (IV)-(VII). $X = a \, vinyl \, gp.$ esp. CHCR7)=C(R8)-where R7 = H or COOYH and R8 = H, Me or CH2COOH; Y = divalent linking gp.; n = 0 or 1; m = 1,2 or 3; R and R' = H or lower alkyl; Z = monovalent siloxane polymeric moiety of Mn above 500; f = 2-6; g = 0 or 1; and h = 0, 1 or 2.

USE - In temporary or permanent dental restoratives, coatings for ortho- or prostho-dontic devices, coatings for redn. of adhesion of plaque, bacteria and strains and, with surfactant(s), as a toothpaste (all claimed).

Member (0005)

ABEQ JP 09506104 W UPAB 20060110

A coating for hard tissue or for surfaces of the oral environment comprises a polymer with the following repeat units: (A) 1-80 wt.% polar(or polarisable)gp.; (B) 0-98 wt.% modulating gp.; and (C) 1-40 wt.% hydrophobic graft polysiloxane chain of mol. wt. at least 500. The polymer opt. also contains pendent crosslinkable (pref. ethylenically unsatd. or epoxy) gps. and/or one or more silane moieties capable of undergoing a condensn. reaction. Opt. also present in the coating is an ethylenically unsatd. cpd. Coating of the oral surface can be effected by in situ Polymerisation of a suitable monomer mixt.. Pref. (A) is derived from a mono- or multi-functional carboxyl gp.-contg. monomer, esp. (meth) acrylic acid, itaconic acid, N-acryloyl glycine, or mono- or multi-functional hydroxyl gp.-contg. monomer, esp. hydroxy-ethyl, -propyl or- Bu (meth) acrylate, glycerol- or pentaerythritol-mono(meth)acrylate, tris (hydroxymethyl)ethane monoacrylate, N-hydroxymethyl(meth)acrylamide, hydroxy-ethyl or -propyl (meth)acrylamide or alkoxy-substd. (meth)acrylates or (meth)acrylamides, or (un)substd. ammonium monomers of formula CH2=C2COLR3(N+R4R5R6)dQ- (I). R2 = H, Me, Et, CN, carboxy or carboxymethyl; d = 1-5; G = a bond or 1-12Chydrocarbyl linking gp. opt. substd. and/or interrupted by an opt. substd. heteroatom; L = 0 or NH; R3 = 1-12C hydrocarbyl linking gp.; R4 and R5 = Hor 1-12C alkyl or together form 2 carbo- or hetero-cyclic gp.; R6 = H or 1-30C alkyl; and Q = (in) organic anion. (C) is derived from a monomer of formulae X(Y)nSi(R)3-mZm (II), XC(0)(CH2)f(0)gSi(R)3-mZm (III), (IV)-(VII). X = a vinyl gp. esp.CHCR7)=C(R8)-where R7 = H or COOYH and R8 = H, Me or CH2COOH; Y = divalent linking qp.; n = 0 or 1; m = 1, 2 or 3; R and R' = H or lower alkyl; Z =monovalent siloxane polymeric moiety of Mn above 500; f = 2-6; g = 0 or 1; and h = 0, 1 or 2.

USE - In temporary or permanent dental restoratives, coatings for ortho- or prostho-dontic devices, coatings for redn. of adhesion of plaque, bacteria and strains and, with surfactant(s), as a toothpaste (all claimed).

Member (0009)

ABEQ CN 1142762 A UPAB 20060110

A coating for hard tissue or for surfaces of the oral environment comprises a polymer with the following repeat units: (A) 1-80 wt.% polar(or polarisable)gp.; (B) 0-98 wt.% modulating gp.; and (C) 1-40 wt.% hydrophobic graft polysiloxane chain of mol. wt. at least 500. The polymer opt. also contains pendent crosslinkable (pref. ethylenically unsatd. or epoxy) gps. and/or one or more silane moieties capable of undergoing a condensn. reaction. Opt. also present in the

coating is an ethylenically unsatd. cpd. Coating of the oral surface can be effected by in situ Polymerisation of a suitable monomer mixt.. Pref. (A) is derived from a mono- or multi-functional carboxyl gp.-contq. monomer, esp. (meth)acrylic acid, itaconic acid, N-acryloyl glycine, or mono- or multi-functional hydroxyl gp.-contg. monomer, esp. hydroxy-ethyl, -propyl or- Bu (meth)acrylate, glycerol- or pentaerythritol-mono(meth)acrylate, tris (hydroxymethyl)ethane monoacrylate, N-hydroxymethyl (meth) acrylamide, hydroxy-ethyl or -propyl (meth) acrylamide or alkoxy-substd. (meth) acrylates or (meth) acrylamides, or (un)substd. ammonium monomers of formula CH2=C2COLR3(N+R4R5R6)dQ- (I). R2 = H, Me, Et, CN, carboxy or carboxymethyl; d = 1-5; G = a bond or 1-12Chydrocarbyl linking qp. opt. substd. and/or interrupted by an opt. substd. heteroatom; L = O or NH; R3 = 1-12C hydrocarbyl linking gp.; R4 and R5 = H or 1-12C alkyl or together form 2 carbo- or hetero-cyclic gp.; R6 = H or 1-30C alkyl; and Q = (in)organic anion. (C) is derived from a monomer of formulae X(Y)nSi(R)3-mZm (II), XC(0)(CH2)f(0)gSi(R)3-mZm (III), (IV)-(VII). X = a vinyl gp. esp.CHCR7) = C(R8) - where R7 = H or COOYH and R8 = H, Me or CH2COOH; Y = divalentlinking gp.; n = 0 or 1; m = 1, 2 or 3; R and R' = H or lower alkyl; Z =monovalent siloxane polymeric moiety of Mn above 500; f = 2-6; g = 0 or 1; and h = 0, 1 or 2.

USE - In temporary or permanent dental restoratives, coatings for ortho- or prostho-dontic devices, coatings for redn. of adhesion of plaque, bacteria and strains and, with surfactant(s), as a toothpaste (all claimed).

=> d ibib ab hitstr 52
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE,
EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS'
- CONTINUE? (Y)/N:y

L271 ANSWER 52 OF 84 USPATFULL on STN

ACCESSION NUMBER: 2004:65993 USPATFULL Full-text

TITLE: Hydrophilic polymers, pressure sensitive adhesives and

coatings

INVENTOR(S): Holquin, Daniel L., Fullerton, CA, United States

Barker, H. Paul, Sherman Oaks, CA, United States

Lee, Ivan S. P., Arcadia, CA, United States Lin, Kenneth S., San Marino, CA, United States

PATENT ASSIGNEE(S): Avery Dennison Corporation, Pasadena, CA, United States

(U.S. corporation)

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Zalukaeva, Tatyana

LEGAL REPRESENTATIVE: Renner, Kenner, Greive, Bobak, Taylor & Weber

NUMBER OF CLAIMS: 15 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 1467

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for the preparation of gel-free poly 2-hydroxyethyl methacrylate AΒ substantially in the absence of a chain transfer agent, comprising introducing monomeric 2-hydroxyethyl methacrylate containing ethylene glycol dimethacrylate impurities in the range of about 0.05 to 0.1% by weight into alcohol, polymerizing the 2-hydroxyethyl methacrylate to form a polymerization mixture, and removing the alcohol. Hydrophilic pressure sensitive adhesives are provided by adding polyethylene glycol to the polymerization mixture prior to removing the alcohol. A method for the preparation of an acrylic emulsion ink jet receptive clear coating, comprising forming a alkyl acrylate monomer-containing pre-emulsion feed mixture, introducing an activator into the alkyl acrylate monomer-containing pre-emulsion feed mixture, reacting a water soluble monomer feed in the alkyl acrylate monomer-containing pre-emulsion feed mixture, the water soluble monomer feed comprising 2-hydroxyethyl methacrylate and a cationic monomer to form a clear polymer in the reaction mixture. In another embodiment, the clear polymer in the butyl acrylate-containing pre-emulsion feed mixture is subsequently reacted with a water insoluble monomer feed mixture comprising 2-hydroxyethyl methacrylate, n-vinyl pyrrolidone, butyl acrylate, and methacrylic acid to form a second clear polymer in addition to the clear polymer in the alkyl acrylate monomer containing pre-emulsion feed mixture.

IT 39990-17-5P, 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer

(hydrophilic polymers for pressure-sensitive adhesives and coatings) 39990-17-5 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 4-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

RN

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

=> d ibib ed ab ind 53-75
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE,
EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS'
- CONTINUE? (Y)/N:y

L271 ANSWER 53 OF 84 JAPIO (C) 2008 JPO on STN

ACCESSION NUMBER: 1996-325200 JAPIO Full-text

TITLE: PRODUCTION OF ALLYL ETHERS

INVENTOR: NAGANO HIDEAKI; YURUGI KEIJI; NAKAGAWA KOICHI; KITA

YUICHI

PATENT ASSIGNEE(S): NIPPON SHOKUBAI CO LTD

PATENT INFORMATION:

PATENT NO KIND DATE ERA MAIN IPC

JP 08325200 A 19961210 Heisei C07C069-734

APPLICATION INFORMATION

STN FORMAT: JP 1996-61431 19960318
ORIGINAL: JP08061431 Heisei
PRIORITY APPLN. INFO.: JP 1995-66300 19950324

SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined

Applications, Vol. 1996

ED 20020506

AB PURPOSE: To obtain an allyl ether compound useful for antistatic agents, water repellents, cement-dispersing agents, various kinds of resins, etc., without causing corrosion of apparatus or environmental disruption due to no production of a hydrogen halide as a by-product by reacting specific acrylic esters with an OH-containing compound. CONSTITUTION: (A) A compound of formula I (R<SB>1</SB> is H or an organic residue; R<SB>2</SB> is an organic residue) (e.g. methyl α-hydroxymethyl acrylate, ethyl -α hydroxymethyl acrylate or n-butyl α-hydroxymethyl acrylate) is reacted with (B) an OH-containing compound such as a compound of formula II [R<SB>3</SB> is R<SB>1</SB>; R<SB>4</SB> is R<SB>2</SB>; (m) is 1-100; (n) is 1-3] in the coexistence of an acid catalyst which is a protonic acid, a polymerization inhibitor and molecular oxygen. COPYRIGHT: (C)1996,JPO

IC ICM C07C069-734

ICS B01J027-18; B01J031-02; C07C067-31

ICA C07B061-00

L271 ANSWER 54 OF 84 MEDLINE on STN

ACCESSION NUMBER: 2001647433 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 11699183

TITLE: Color stability of a resin-modified glass ionomer

cement.

AUTHOR: Yap A U; Sim C P; Loganathan V

CORPORATE SOURCE: Department of Restorative Dentistry, Faculty of Dentistry,

Centre for Biomedical Materials Application and Technology, National University of Singapore, Institute of Materials

Research and Engineering, Singapore.

SOURCE: Operative dentistry, (2001 Nov-Dec) Vol. 26, No.

6, pp. 591-6.

Journal code: 7605679. ISSN: 0361-7734.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Dental Journals

ENTRY MONTH: 200201

ENTRY DATE: Entered STN: 12 Nov 2001

Last Updated on STN: 25 Jan 2002 Entered Medline: 22 Jan 2002

ED Entered STN: 12 Nov 2001

> Last Updated on STN: 25 Jan 2002 Entered Medline: 22 Jan 2002

AB The color stability of a resin-modified glass ionomer cement (Fuji II LC) was investigated over six months using colorimetry. Five shades (A2, A3, A4, B3 and C4) were selected and 10 square specimens (7 mm wide and long, and 1.5 mm deep) were made for each shade using special grit molds. CIE L*, a*, b* color parameters of the specimens were taken at one day, one week, one month, three months and six months. Results were subjected to MANOVA and ANOVA/Scheffe's test at significance level 0.05. The effects of time on color parameters (L*, a*, b* values) were found to be shade dependent. All shades exhibited a decrease in L* values over time. With the exception of shade B3, significant differences in L^* values were observed at six months. A general decrease in b* values was also observed but differences among the various time intervals were not significant except for shades A3 and C4. No apparent trends were observed for changes in a* values. For all shades, the largest color change (delta E) was observed between one day and one week. The color stability of the resin-modified glass ionomer investigated was shade dependent. A general decrease in lightness and yellow chroma was observed.

CTAnalysis of Variance

Color

Colorimetry

Drug Stability

*Glass Ionomer Cements: CH, chemistry

Materials Testing

Methacrylates: CH, chemistry

*Prosthesis Coloring
*Resins, Synthetic: CH, chemistry

Statistics, Nonparametric

Time Factors

RN 868-77-9 (hydroxyethyl methacrylate)

0 (Fuji II LC cement); 0 (Glass Ionomer Cements); 0 (Methacrylates); 0 CN (Resins, Synthetic)

L271 ANSWER 55 OF 84 MEDLINE on STN

ACCESSION NUMBER: 2002023189 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 11453875

TITLE: Comparative analysis of human serum albumin adsorption and

complement activation for intraocular lenses.

AUTHOR: Pokidysheva E N; Maklakova I A; Belomestnaya Z M; Perova N

V; Bagrov S N; Sevastianov V I

Moscow Institute of Physics and Technology, Moscow, Russia. CORPORATE SOURCE:

SOURCE: Artificial organs, (2001 Jun) Vol. 25, No. 6, pp.

Journal code: 7802778. ISSN: 0160-564X.

PUB. COUNTRY: United States

DOCUMENT TYPE: (COMPARATIVE STUDY)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200112

ENTRY DATE: Entered STN: 21 Jan 2002

Last Updated on STN: 21 Jan 2002

Entered Medline: 4 Dec 2001

ED Entered STN: 21 Jan 2002

Last Updated on STN: 21 Jan 2002

Entered Medline: 4 Dec 2001

Intraocular liquid, in contrast to blood, has no cellular components; AΒ therefore, proteins (human serum albumin [HSA], and [alpha, beta, gamma] globulins) are the major components that determine patients' response to the

intraocular lens (IOL) surface. In addition to the amount of adsorbed proteins, the possibility of its conformational changes, including conformational changes of globulins C1 and C3 that respond for the activation of the complements system by the classical and alternative pathways, cannot be excluded. The interaction between IOLs and protein components of intraocular liquid directly influences the ocular exudative reaction in the early postoperational period, the intensity of cellular and pigmental scurf on the surface of the IOLs, and the state of endothelial cells of the cornea in the distant postoperational period. Our goal was to compare the interaction of commercial IOLs made from polymethylmethacrylate, silicone, poly-2hydroxyethyl methacrylate (p-HEMA), and copolymer p-HEMA with collagen with HSA and the complement system. The total internal reflection fluorescence (TIRF) method and hemolytic assay were used for this task, respectively. It has been demonstrated that the probability of biocompatibility of commercially produced IOLs on the stage of protein adsorption can be evaluated using the kinetic of HSA-fluorescein isothiocyanate adsorption onto the IOL surface by the TIRF METHOD: In the case of IOLs from p-HEMA, a negative correlation was shown between the degree of irreversible adsorption of HSA and the minimum relative rate constant of the surface-induced complement activation. We did not find any correlation between hydrophilicity/hydrophobicity of lenses and their adsorptional properties including complement activation. From suggested adsorptional criteria in vitro for biocompatible surfaces, the hydrogel lens from p-HEMA has a lower probability of biocompatibility in comparison with other IOLs.

CT Adsorption

Biocompatible Materials: CH, chemistry

Collagen: CH, chemistry

*Complement Activation

Fluorescence

Humans

Hydrogels: CH, chemistry

Kinetics

*Lenses, Intraocular Materials Testing

Methacrylates: CH, chemistry

Polymethyl Methacrylate: CH, chemistry

*Serum Albumin: ME, metabolism Silicones: CH, chemistry

Surface Properties

RN 868-77-9 (hydroxyethyl methacrylate); 9007-34-5 (Collagen);

9011-14-7 (Polymethyl Methacrylate)

CN 0 (Biocompatible Materials); 0 (Hydrogels); 0 (Methacrylates); 0 (Serum Albumin); 0 (Silicones)

L271 ANSWER 56 OF 84 MEDLINE on STN

ACCESSION NUMBER: 2001206113 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 11298912

TITLE: Bonding agent is a decisive factor in determining the

marginal leakage of dental composites subjected to thermal

cycling: an in vitro study.

AUTHOR: Mathew M; Parameswaran Nair E K; Krishnan K 5th CORPORATE SOURCE: Yenepoya Dental College, Kodial Bail, Mangalore. Journal of oral rehabilitation, (2001 Jan) Vol.

28, No. 1, pp. 68-77.

Journal code: 0433604. ISSN: 0305-182X.

PUB. COUNTRY: England: United Kingdom DOCUMENT TYPE: (COMPARATIVE STUDY)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Dental Journals; Priority Journals

ENTRY MONTH: 200108

ENTRY DATE: Entered STN: 13 Aug 2001

Last Updated on STN: 13 Aug 2001

Entered Medline: 9 Aug 2001

ED Entered STN: 13 Aug 2001

> Last Updated on STN: 13 Aug 2001 Entered Medline: 9 Aug 2001

The marginal leakage at the dentine/composite interface in Class II composite AΒ restorations subjected to thermal cycling has been effectively evaluated using the silver staining technique. The presence of a bonding agent at the dentine/composite interface is found to improve adhesion. Scanning electron and optical microscopic observations of sectioned specimens reveal that applying a second coat of bonding agent on the dentinal surface helps in reducing microleakage compared to a single coat application, in all three radiopaque composite/bonding agent systems studied (Z100/Single Bond, Spectrum TPH/Prime & Bond 2.1 and Chitra/Chitrabond 1.0). Thermal cycling during in vitro studies was found to provide a more appropriate representation of the adhesive behaviour of the composite in clinical situations.

CTAdhesiveness

Bisphenol A-Glycidyl Methacrylate: CH, chemistry

Coloring Agents: DU, diagnostic use *Composite Resins: CH, chemistry

*Dental Bonding

Dental Enamel: UL, ultrastructure *Dental Leakage: CL, classification

Dental Restoration, Permanent: CL, classification

Dentin: UL, ultrastructure

*Dentin-Bonding Agents: CH, chemistry

Humans

Marginal Adaptation (Dentistry)

Materials Testing

Methacrylates: CH, chemistry Microscopy, Electron, Scanning

Polyethylene Glycols: CH, chemistry Polymethacrylic Acids: CH, chemistry

*Silicon Dioxide

Silver Nitrate: DU, diagnostic use

Surface Properties

Thermodynamics

*Zirconium

109-16-0 (triethylene glycol dimethacrylate); 1565-94-2 (Bisphenol RN A-Glycidyl Methacrylate); 7440-67-7 (Zirconium); 7631-86-9 (Silicon Dioxide); 7761-88-8 (Silver Nitrate); 868-77-9 (hydroxyethyl

methacrvlate)

0 (Coloring Agents); 0 (Composite Resins); 0 (Dentin-Bonding Agents); 0 (Methacrylates); 0 (Polyethylene Glycols); 0 (Polymethacrylic Acids); 0 (Prime & Bond); 0 (Spectrum composite resin); 0 (Z100 composite resin); 0 (single bond)

L271 ANSWER 57 OF 84 MEDLINE on STN

ACCESSION NUMBER: 2001132260 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 11199725

TITLE: Dentin bonding and sealing ability of a new root canal

resin sealer.

AUTHOR: Kataoka H; Yoshioka T; Suda H; Imai Y

CORPORATE SOURCE: Department of Endodontics, Faculty of Dentistry, Tokyo

Medical and Dental University, 1-5-45, Yushima, Bunkyo-ku,

Tokyo 113-8549, Japan.

SOURCE: Journal of endodontics, (2000 Apr) Vol. 26, No.

4, pp. 230-5.

Journal code: 7511484. ISSN: 0099-2399.

PUB. COUNTRY: United States DOCUMENT TYPE: (COMPARATIVE STUDY)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Dental Journals

ENTRY MONTH: 200103

Entered STN: 4 Apr 2001 ENTRY DATE:

> Last Updated on STN: 4 Apr 2001 Entered Medline: 1 Mar 2001

Entered STN: 4 Apr 2001 ED

> Last Updated on STN: 4 Apr 2001 Entered Medline: 1 Mar 2001

The aims of this study were to find a dentin bonding system suitable for root AΒ canal treatment using a newly developed root canal resin sealer, and to examine its sealing ability. The sealer was composed of vinylidene fluoride/hexafluoropropylene copolymer, methyl methacrylate, zirconia, and tributylborane catalyst. The effects of dentin conditioners and primers on dentin bonding were studied by tensile bond strength testing and scanning electron microscopy. Apical and coronal leakage were evaluated at 1-, 4-, and 12-wk intervals by a dye penetration test using a methylene blue solution. Pulp Canal Sealer EWT and Sealapex were used as controls. Significantly high bond strength was obtained by treating dentin with EDTA, followed by application of a glutaraldehyde/2-hydroxyethyl methacrylate primer. experimental resin sealer produced a significantly superior coronal seal at 12 wk when compared with the two control sealers (p < 0.05). Scanning electron microscopic examination revealed few gaps at the resin sealer-dentin interface.

CTAlkenes: CH, chemistry Analysis of Variance

> Boron Compounds: CH, chemistry <u>Calcium Hydrozide: CH, chemistry</u> Chelating Agents: AD, administration & dosage

Coloring Agents: DU, diagnostic use

*Dental Bonding: MT, methods

Dental Leakage: CL, classification

*Dentin: UL, ultrastructure

Dentin-Bonding Agents: CH, chemistry Edetic Acid: AD, administration & dosage

Fluorides: CH, chemistry Glutaral: CH, chemistry

Humans

Materials Testing

Methacrylates: CH, chemistry

Methylene Blue: DU, diagnostic use Methylmethacrylate: CH, chemistry

Microscopy, Electron, Scanning *Resin Cements: CH, chemistry

*Root Canal Filling Materials: CH, chemistry

Root Canal Irrigants: AD, administration & dosage

Salicylates: CH, chemistry

Surface Properties Tensile Strength

Time Factors

Vinyl Compounds: CH, chemistry

Zirconium: CH, chemistry

111-30-8 (Glutaral); 115-07-1 (propylene); 115055-59-9 (Sealapex);

122-56-5 (tri-n-butylborane); 1305-62-0 (Calcium Hydroxide);

1314-23-4 (zirconium oxide); 60-00-4 (Edetic Acid); 61-73-4 (Methylene Blue); 7440-67-7 (Zirconium); 75-38-7 (1,1-difluoroethylene); 80-62-6

L271 ANSWER 58 OF 84 MEDLINE on STN

ACCESSION NUMBER: 2000087097 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 10620155

TITLE: Fracture resistance of four different restorations for

cuspal replacement.

AUTHOR: Segura A; Riggins R

CORPORATE SOURCE: Department of Hospital Dentistry, University of Iowa, Iowa

City, USA.. segura@uthsca.edu

SOURCE: Journal of oral rehabilitation, (1999 Dec) Vol.

26, No. 12, pp. 928-31.

Journal code: 0433604. ISSN: 0305-182X.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: (CLINICAL TRIAL)

(COMPARATIVE STUDY)

Journal; Article; (JOURNAL ARTICLE)

(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Dental Journals; Priority Journals

ENTRY MONTH: 200002

ENTRY DATE: Entered STN: 18 Feb 2000

Last Updated on STN: 18 Feb 2000 Entered Medline: 10 Feb 2000

ED Entered STN: 18 Feb 2000

Last Updated on STN: 18 Feb 2000 Entered Medline: 10 Feb 2000

The purpose of this study was to compare the fracture resistance of four AΒ posterior restorations involving an entire cusp replacement. Four groups were established, each containing eight caries-free mandibular molars, similar in size and anatomic form. A mesio-occlusal preparation including the lingual cusp was prepared on all teeth. Group A were restored with a pin-retained amalgam. Group B were restored with amalgam and a meta adhesive. Group C were restored with a composite resin with a beta-glass quartz insert. Group D were restored with composite resin and a HEMA adhesive. All specimens were mounted in acrylic and stored in artificial saliva for 30 days. Each specimen was loaded in compression at a 90 degrees angle in an Instron testing machine with a crosshead speed of 0.5 cm/min. Results demonstrated the mean (SD) failure loads in kilograms for each group to be: A, 1155 (388); B, 1232 (436); C, 1345 (375); D, 1595 (373). Analysis of variance indicated no significant difference among groups at P<0.05. Although the values for the composite resin restoration with the adhesive were higher than the other restorative techniques.

CT *Adhesives

Adhesives: CH, chemistry Analysis of Variance

Bisphenol A-Glycidyl Methacrylate: CH, chemistry

Ceramics: CH, chemistry

*Composite Resins

Composite Resins: CH, chemistry

*Dental Amalgam

Dental Amalgam: CH, chemistry Dental Cavity Preparation

Dental Pins

*Dental Restoration Failure

*Dental Restoration, Permanent: MT, methods

Dental Stress Analysis: IS, instrumentation Dentin-Bonding Agents: CH, chemistry Glass: CH, chemistry Humans Materials Testing Methacrylates: CH, chemistry Methylmethacrylate: CH, chemistry Molar Quartz: CH, chemistry Resin Cements: CH, chemistry Saliva, Artificial: CH, chemistry Stress, Mechanical Surface Properties 14808-60-7 (Quartz); 1565-94-2 (Bisphenol A-Glycidyl Methacrylate); RN 70293-55-9 (4-methacryloxyethyltrimellitic acid anhydride); 80-62-6 (Methylmethacrylate); 8049-85-2 (Dental Amalgam); 868-77-9 (hydroxyethyl methacrylate) 0 (Adhesives); 0 (Amalgambond); 0 (Beta-Quartz glass-ceramic); 0 (Ceramics); 0 (Composite Resins); 0 (Dentin-Bonding Agents); 0 (Methacrylates); 0 (Resin Cements); 0 (Saliva, Artificial); 0 (Scotchbond Multi-Purpose) L271 ANSWER 59 OF 84 MEDLINE on STN 1998372397 ACCESSION NUMBER: MEDLINE Full-text PubMed ID: 9708692 DOCUMENT NUMBER: Use of 2-isocyanatoethyl methacrylate and iron TITLE: (II) perchlorate for bonding tri-n-butylborane-initiated luting agents to dentin. Taira Y; Matsumura H; Atsuta M AUTHOR: CORPORATE SOURCE: Department of Fixed Prosthodontics, Nagasaki University School of Dentistry, Sakamoto, Japan.. yohsuke@net.nagasakiu.ac.jp European journal of oral sciences, (1998 Aug) SOURCE: Vol. 106, No. 4, pp. 887-91. Journal code: 9504563. ISSN: 0909-8836. PUB. COUNTRY: Denmark DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T) LANGUAGE: English FILE SEGMENT: Dental Journals; Priority Journals 199810 ENTRY MONTH: Entered STN: 21 Oct 1998 ENTRY DATE: Last Updated on STN: 29 Jan 1999 Entered Medline: 13 Oct 1998 ED Entered STN: 21 Oct 1998 Last Updated on STN: 29 Jan 1999 Entered Medline: 13 Oct 1998 AΒ The present study investigated the effect of 2-isocyanatoethyl methacrylate (IEM) and iron (II) perchlorate on dentin adhesion. Four primers were evaluated, consisting of aqueous 2-hydroxyethyl methacrylate (HEMA) solutions containing 5, 10, 20 or 50 micromol/g iron (II) perchlorate. Five luting agents were prepared with methyl methacrylate (MMA), poly(methyl methacrylate) (PMMA), tri-n-butylborane (TBB) initiator and IEM. The concentrations of IEM in the luting agents were 0.2, 0.4, 0.8, 2.0 and 4.0 wt%. Extracted bovine teeth were ground to expose the dentin, etched with an aqueous solution of 10 wt% phosphoric acid, primed, and then bonded with stainless-steel rods; tensile bond strengths were determined after 1 d immersion in water. highest bond strength (20.7 MPa) was recorded for the group using 10

micromol/g iron (II) perchlorate and 2.0 wt% IEM. The use of IEM was

effective in decreasing the optimal concentration of iron (II) perchlorate,

```
and this may contribute to the <u>color</u> stability of <u>iron</u>-containing pretreatment
     agents.
CT
     Acid Etching, Dental
     Analysis of Variance
      Animals
     *Boron Compounds: CH, chemistry
     Cattle
       Color
     *Dental Bonding
     *Dentin: UL, ultrastructure
     *Dentin-Bonding Agents: CH, chemistry
      Evaluation Studies as Topic
       *Ferric Compounds: CH, chemistry
      Immersion
     *Isocyanates: CH, chemistry
     *Methacrylates: CH, chemistry
       Methylmethacrylate
       Methylmethacrylates: CH, chemistry
     *Perchloric Acid: CH, chemistry
      Phosphoric Acids: AD, administration & dosage
       Polymethyl Methacrylate: CH, chemistry
      Stainless Steel: CH, chemistry
      Tensile Strength
      Water
     122-56-5 (tri-n-butylborane); 12597-68-1 (Stainless Steel);
RN
     13537-24-1 (iron perchlorate); 30674-80-7 (2-isocyanatoethyl
     methacrylate); 7601-90-3 (Perchloric Acid); 7732-18-5 (Water); 80-62-6
     (Methylmethacrylate); 868-77-9 (hydroxyethyl methacrylate);
     9011-14-7 (Polymethyl Methacrylate)
CN
     0 (Boron Compounds); 0 (Dentin-Bonding Agents); 0 (Ferric
     Compounds); 0 (Isocyanates); 0 (Methacrylates); 0 (Methylmethacrylates); 0
     (Phosphoric Acids)
L271 ANSWER 60 OF 84
                         MEDLINE on STN
ACCESSION NUMBER: 97350678
                                 MEDLINE Full-text
DOCUMENT NUMBER:
                    PubMed ID: 9206381
TITLE:
                    Diffusion of resin monomers through human carious dentin in
                    vitro.
                    Hamid A; Hume W R
AUTHOR:
CORPORATE SOURCE:
                    Department of Restorative Dentistry, University of
                    California, San Francisco 94143-0758, USA.
                    R01-DE10331-01A1 (United States NIDCR)
CONTRACT NUMBER:
SOURCE:
                    Endodontics & dental traumatology, (1997 Feb)
                    Vol. 13, No. 1, pp. 1-5.
                    Journal code: 8508054. ISSN: 0109-2502.
PUB. COUNTRY:
                    Denmark
DOCUMENT TYPE:
                    (COMPARATIVE STUDY)
                    Journal; Article; (JOURNAL ARTICLE)
                    (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE:
                    English
FILE SEGMENT:
                    Dental Journals
ENTRY MONTH:
                    199707
ENTRY DATE:
                    Entered STN: 24 Jul 1997
                    Last Updated on STN: 3 Mar 2000
                    Entered Medline: 11 Jul 1997
ED
     Entered STN: 24 Jul 1997
     Last Updated on STN: 3 Mar 2000
     Entered Medline: 11 Jul 1997
     The diffusion of 2-hydroxyethylmethacrylate (HEMA) and triethylene glycol
AΒ
```

dimethacrylate (TEGDMA) from light cured bonding resin-composite resin

restorations through human carious dentin was investigated. Extracted human molar teeth with different degrees of caries were obtained from consenting donors. Teeth were classified into three groups according to caries severity (mild, moderate and severe) using subjective criteria. The outer carious lesions were then removed guided by a proprietary caries detector dye. Teeth with exposure of the pulp space after caries removal were excluded from the study. A polypropylene chamber was attached to the cemento-enamel junction of each tooth to contain 1 ml distilled water. Each cavity was restored with a HEMA containing bonding resin then a TEGDMA-containing resin composite. Water samples were retrieved over a time course and analyzed by high performance liquid chromatography. There was great variation between teeth in HEMA and TEGDMA permeability. The cumulative amounts released were of similar magnitude to those observed in non-carious teeth for the mild and moderatelysevere groups. However, the cumulative amounts released were markedly greater in severely carious teeth than in those with moderate or mild caries.

CT Check Tags: Female; Male

Adult

Analysis of Variance

Coloring Agents: CH, chemistry Coloring Agents: DU, diagnostic use *Composite Resins: CH, chemistry

*Dental Caries: ME, metabolism

*Dentin: ME, metabolism

*Dentin Permeability

Diffusion

Humans

Methacrylates: CH, chemistry

Middle Aged

Polyethylene Glycols: CH, chemistry Polymethacrylic Acids: CH, chemistry

Time Factors

RN 109-16-0 (triethylene glycol dimethacrylate); 868-77-9 (hydroxyethyl methacrylate)

0 (Coloring Agents); 0 (Composite Resins); 0 (Methacrylates); 0 CN (Polyethylene Glycols); 0 (Polymethacrylic Acids)

L271 ANSWER 61 OF 84 MEDLINE on STN

ACCESSION NUMBER: 96369941 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 8773880

TITLE: Preliminary in vitro cytotoxicity screening of a bead-formed macroporous hydrophilic polymer matrix.

Atkins T W; Tighe B J AUTHOR:

CORPORATE SOURCE: Department of Pharmaceutical and Biological Sciences, Aston

University, Birmingham, UK.

SOURCE: Journal of biomaterials science. Polymer edition,

(1996) Vol. 7, No. 9, pp. 759-68.

Journal code: 9007393. ISSN: 0920-5063.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: (COMPARATIVE STUDY)

> Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199702

ENTRY DATE: Entered STN: 6 Mar 1997

> Last Updated on STN: 6 Feb 1998 Entered Medline: 24 Feb 1997

Entered STN: 6 Mar 1997 ED

> Last Updated on STN: 6 Feb 1998 Entered Medline: 24 Feb 1997

AΒ A prescreen of the in vitro cytotoxicity of both the primary fabrication components and potential leachables from a bead-formed macroporous poly(2hydroxyethyl methacrylate), (pHEMA) matrix has been carried out using INVITTOX Neutral red and Kenacid blue R dye binding methods. Of the eluants obtained from 24, 48, and 72-h incubated beads, only the 72-h eluant produced a greater than 20% (ID20) inhibition of 3T3-L1 cell proliferation with values of 20.98 +/- 2.33% and 21.41 +/- 1.37% inhibition for the Neutral red and Kenacid blue R binding methods, respectively. ID50 values for the fabrication components obtained using the Kenacid blue R method were generally higher than those obtained by the Neutral red assay, although the ranking of the chemicals in terms of their relative cytotoxicities was identical by both methods, i.e. ethylene glycol dimethacrylate > uranyl nitrate > purified HEMA > n-hexane > ethylene glycol (mmol 1(-1)). Whilst extended washing of finished PHEMA beads in water will reduce their acute in vitro cytotoxicity, this will only be achieved with some loss of previously encapsulated water soluble macromolecules. CT2,4-Dinitrophenol: TO, toxicity 3T3 Cells Animals *Cell Survival: DE, drug effects Coloring Agents Ethylene Glycol Ethylene Glycols: TO, toxicity Hexanes: TO, toxicity Hydrogel Indicators and Reagents Kinetics Methacrylates: TO, toxicity Mice Neutral Red Organic Chemicals Polyethylene Glycols *Polyhydroxyethyl Methacrylate: TO, toxicity Time Factors Uranyl Nitrate: TO, toxicity 10102-06-4 (Uranyl Nitrate); 107-21-1 (Ethylene Glycol); 108066-47-3 RN (kenacid blue); 110-54-3 (n-hexane); 25249-16-5 (Polyhydroxyethyl Methacrylate); 25852-47-5 (Hydrogel); 51-28-5 (2,4-Dinitrophenol); 553-24-2 (Neutral Red); 868-77-9 (hydroxyethyl methacrylate) 0 (Coloring Agents); 0 (Ethylene Glycols); 0 (Hexanes); 0 CN (Indicators and Reagents); 0 (Methacrylates); 0 (Organic Chemicals); 0 (Polyethylene Glycols) L271 ANSWER 62 OF 84 MEDLINE on STN MEDLINE Full-text ACCESSION NUMBER: 96378709 DOCUMENT NUMBER: PubMed ID: 8784272 TITLE: Allergic contact dermatitis to artificial fingernails prepared from UV light-cured acrylates. AUTHOR: Hemmer W; Focke M; Wantke F; Gotz M; Jarisch R CORPORATE SOURCE: Dermatologic and Pediatric Allergy Clinic, Vienna, Austria. SOURCE: Journal of the American Academy of Dermatology, (1996 Sep) Vol. 35, No. 3 Pt 1, pp. 377-80. Journal code: 7907132. ISSN: 0190-9622. PUB. COUNTRY: United States DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) LANGUAGE: English Priority Journals FILE SEGMENT: ENTRY MONTH: 199610 ENTRY DATE: Entered STN: 22 Oct 1996 Last Updated on STN: 22 Oct 1996

Entered Medline: 10 Oct 1996

ED Entered STN: 22 Oct 1996

Last Updated on STN: 22 Oct 1996

Entered Medline: 10 Oct 1996

BACKGROUND: Contact dermatitis from artificial nails made from self-curing AΒ acrylic resins is occasionally reported. Recently, UV light-cured products introducing new acrylics have become available. OBJECTIVE: Our purpose was to identify relevant allergens in commercial light-curing products by patch tests and to evaluate the efficacy of "hypoallergenic" products by inclusion into the test series. METHODS: Patients wearing photobonded acrylic nails who had perionychial and subonychial eczema were patch tested with an acrylate battery and "hypoallergenic" commercial products. RESULTS: Triethyleneglycol dimethacrylate, hydroxyfunctional methacrylates, and (meth)-acrylated urethanes proved to be relevant allergens in photobonded nail preparations. Methacrylated epoxy resin sensitization was not observed. All "hypoallergenic" products provoked positive reactions. CONCLUSION: The omission of irritant methacrylic acid in UV-curable products does not reduce the high sensitizing potential of new acrylates. In contrast to the manufacturers' declarations, all "hypoallergenic" products continue to include acrylate functional monomers and therefore continue to cause allergic sensitization.

Check Tags: Female CT

Acrylates: AE, adverse effects

*Acrylic Resins: AE, adverse effects

Acrylic Resins: IP, isolation & purification Acrylic Resins: RE, radiation effects

Allergens: AE, adverse effects

Allergens: IP, isolation & purification

Bisphenol A-Glycidyl Methacrylate: AE, adverse effects

Composite Resins: AE, adverse effects

*Cosmetics: AE, adverse effects

Cosmetics: RE, radiation effects

*Dermatitis, Allergic Contact: ET, etiology

Eczema: CI, chemically induced

Epoxy Resins

Fingers

Humans

Irritants: AE, adverse effects Methacrylates: AE, adverse effects *Nail Diseases: CI, chemically induced

*Nails

Patch Tests

Polyethylene Glycols: AE, adverse effects Polymethacrylic Acids: AE, adverse effects

Polyurethanes: AE, adverse effects

Ultraviolet Rays

RN 109-16-0 (triethylene glycol dimethacrylate); 125523-74-2 (urethane dimethacrylate luting resin); 141-32-2 (n-butyl acrylate); 1565-94-2 (Bisphenol A-Glycidyl Methacrylate); 27813-02-1 (hydroxypropyl methacrylate); 79-41-4 (methacrylic acid); 868-77-9 (hydroxyethyl methacrylate)

CN 0 (Acrylates); 0 (Acrylic Resins); 0 (Allergens); 0 (Composite Resins); 0 (Cosmetics); 0 (Epoxy Resins); 0 (Irritants); 0 (Methacrylates); 0 (Polyethylene Glycols); 0 (Polymethacrylic Acids); 0 (Polyurethanes)

L271 ANSWER 63 OF 84 MEDLINE on STN

94170351 ACCESSION NUMBER: MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 8124694

Effect of artificial saliva and calcium on fluoride output TITLE:

of controlled-release devices.

AUTHOR: Adair S M; Whitford G M; McKnight-Hanes C

CORPORATE SOURCE: Department of Pediatric Dentistry, School of Dentistry,

Medical College of Georgia, Augusta 30912-1210.

CONTRACT NUMBER: DE-06113 (United States NIDCR)

SOURCE: Caries research, (1994) Vol. 28, No. 1, pp.

28-34.

Journal code: 0103374. ISSN: 0008-6568.

PUB. COUNTRY: Switzerland

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LANGUAGE: English

FILE SEGMENT: Dental Journals; Priority Journals

ENTRY MONTH: 199404

ENTRY DATE: Entered STN: 20 Apr 1994

Last Updated on STN: 3 Mar 2000 Entered Medline: 14 Apr 1994

ED Entered STN: 20 Apr 1994

Last Updated on STN: 3 Mar 2000 Entered Medline: 14 Apr 1994

The purpose of this in vitro study was to assess the effect of graded AΒ concentrations of calcium in artificial saliva on the output of fluoride from HEMA/MMA controlled-release devices. After the initial release rates were determined in deionized water, the devices were assigned to five groups. The devices of one group remained in deionized water throughout the 19-day study while those of the other groups were placed in artificial saliva containing 0, 4.5, 8.0, or 12.0 mg% calcium on days 4-13. Ten devices of each group were placed in deionized water again on days 14-17 and then in 0.1 mol/l HCl on days 18-19. The five devices of each group that were not placed in decinized water on day 14 were inspected for surface crystals and then placed in 1 mol/l KOH for 2 days. The fluoride release rates in artificial saliva were reduced by 71-90% and in proportion to the calcium concentration. The release rates in deionized water (days 14-17) approached the baseline values; they exceeded baseline rates by 13-49% while in HCl. The fluoride release rates did not differ among the groups while in KOH, but calcium output was directly related to the calcium concentration of the artificial saliva. The results indicate that fluoride release from HEMA/MMA devices is markedly reduced in artificial saliva and that the reduction is proportional to the concentration of calcium.

CT *Calcium: CH, chemistry

Crystallization

Delayed-Action Preparations

Diffusion
Drug Carriers

Methacrylates: CH, chemistry

Methylmethacrylate

Methylmethacrylates: CH, chemistry *Saliva, Artificial: CH, chemistry

*Sodium Fluoride: CH, chemistry

Time Factors

Water

RN 7440-70-2 (Calcium); 7681-49-4 (Sodium Fluoride); 7732-18-5 (Water); 80-62-6 (Methylmethacrylate); 868-77-9 (hydroxyethyl methacrylate)

CN 0 (Delayed-Action Preparations); 0 (Drug Carriers); 0 (Methacrylates); 0 (Methylmethacrylates); 0 (Saliva, Artificial)

L271 ANSWER 64 OF 84 MEDLINE on STN

ACCESSION NUMBER: 92314150 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 1617000

TITLE: Adaptations of Goldner's Masson trichrome stain for the

study of undecalcified plastic embedded bone.

AUTHOR: Gruber H E

CORPORATE SOURCE: Medical Genetics-Birth Defects Center, Cedars-Sinai Medical

Center, Los Angeles, California 90048.

CONTRACT NUMBER: 1 PO1 1HD22657-05 (United States NICHD)

SOURCE: Biotechnic & histochemistry: official publication of the

Biological Stain Commission, (1992 Jan) Vol. 67,

No. 1, pp. 30-4.

Journal code: 9107378. ISSN: 1052-0295.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199207

ENTRY DATE: Entered STN: 15 Aug 1992

Last Updated on STN: 29 Jan 1999 Entered Medline: 31 Jul 1992

ED Entered STN: 15 Aug 1992

Last Updated on STN: 29 Jan 1999 Entered Medline: 31 Jul 1992

AB Specialized adaptations for application of Goldner's Masson trichrome stain to plastic embedded undecalcified bone specimens are presented. This stain can be used successfully on methyl-glycol methacrylate, glycol methacrylate and Spurr embedded bones. The stain affords the advantage of good cellular staining due to the hematoxylin component with concomitant sharp discrimination of mature bone matrix which stains green, immature new bone matrix which stains red, and calcified cartilage which stains very pale green. Use of red filters during photomicrography aids in bone-osteoid discrimination in black and white photographs.

CT *Azo Compounds

Biopsy

*Bone Diseases, Metabolic: PA, pathology

*Bone and Bones: PA, pathology

Calcification, Physiologic: PH, physiology

*Coloring Agents
*Eosine Yellowish-(YS)

Humans

Infant, Newborn
Methacrylates
*Methyl Green

Methylmethacrylate Methylmethacrylates

Osteoporosis: PA, pathology Plastic Embedding: MT, methods

RN 17372-87-1 (Eosine Yellowish-(YS)); 80-62-6 (Methylmethacrylate); 82-94-0

(Methyl Green); 868-77-9 (hydroxyethyl methacrylate)

CN 0 (Azo Compounds); 0 (Coloring Agents); 0 (Methacrylates); 0 (Methylmethacrylates); 0 (trichrome stain)

L271 ANSWER 65 OF 84 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 2001310609 EMBASE <u>Full-text</u>
TITLE: Novel biomaterials for drug delivery.

AUTHOR: Luo Y.; Prestwich G.D.

CORPORATE SOURCE: Prof. G.D. Prestwich, The University of Utah, Department of

Medicinal Chemistry, 30 South 2000 East, Salt Lake City, UT 84112-5820, United States. gprestwich@deans.pharm.utah.edu

SOURCE: Expert Opinion on Therapeutic Patents, (2001) Vol. 11, No.

9, pp. 1395-1410.

Refs: 104

ISSN: 1354-3776 CODEN: EOTPEG

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; General Review; (Review)

FILE SEGMENT: 027 Biophysics, Bioengineering and Medical

Instrumentation

037 Drug Literature Index

039 Pharmacy

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20 Sep 2001

Last Updated on STN: 20 Sep 2001

ED Entered STN: 20 Sep 2001

Last Updated on STN: 20 Sep 2001

Safety and efficacy of pharmaceutical agents can be greatly improved by AΒ encapsulation within, or covalent attachment to, a biomaterial carrier. Such drug delivery systems differ from conventional drug dosage forms (pills, tablets, ointments, creams, injectables and 'tiny time capsules') in that a localised depot of drug provides patterned release of the active agent with a pre-determined time course. The pattern of drug release may be constant, oscillating, declining continuously, or even pulsatile. The need to engineer different release patterns for drugs of different molecular sizes, potency, stability and hydrophobicity provides the impetus for active study of the design of new biomaterials, intelligent delivery systems and approaches for delivery through different portals in the body. The field of controlled drug delivery provides a driving force for current innovations in biomaterials. For most drug delivery systems, polymers function simply as inert, biocompatible carriers. In other systems, polymers can be designed with targeting or pathology-responsive functions. This review summarises some of the recently developed intellectual property in the field of biomaterials applied to drug delivery systems. Included are implantable ceramics and other inorganic materials, non-degradable and degradable synthetic polymers, natural polymers and hybrid biomaterials derived from synthetic and natural polymers.

CT Medical Descriptors:

biocompatibility

biodegradation

ceramics

controlled drug release

controlled study

drug delivery system

drug dosage form

drug formulation

drug potency

drug release

drug stability

foreign body reaction

gel

hydrogel

hydrophilicity

hydrophobicity

macromolecule

microcapsule

molecular size

review

CT Drug Descriptors:

2 hydroxyethyl methacrylate

aluminum oxide

*biomaterial

bovine serum albumin: PR, pharmaceutics

calcium phosphate

copolymer

dacron

```
drug carrier
     hirudin: PR, pharmaceutics
     hydroxyapatite
     inorganic compound
     levonorgestrel: AN, drug analysis
     levonorgestrel: PR, pharmaceutics
     macrogol
     methacrylic acid methyl ester
     methotrexate: AN, drug analysis
     methotrexate: PR, pharmaceutics
     microsphere
     paclitaxel: AN, drug analysis
     paclitaxel: PR, pharmaceutics
     politef
     poloxamer
       polyacrylic acid
     polyanhydride
     polycaprolactone
     polyester
     polyglactin
     polyglycolic acid
       polylactic acid
     polymer
     polyvinyl alcohol
     povidone
     unindexed drug
    (2 hydroxyethyl methacrylate) 868-77-9; (aluminum oxide)
     1302-74-5, 1318-23-6, 1344-28-1, 14762-49-3; (calcium phosphate)
     10103-46-5, 13767-12-9, 14358-97-5, 7758-87-4; (dacron) 60527-88-0;
     (hirudin) 8001-27-2; (hydroxyapatite) 1306-06-5, 51198-94-8;
     (levonorgestrel) 797-63-7; (macrogol) 25322-68-3; (methacrylic acid methyl
     ester) 80-62-6; (methotrexate) 15475-56-6, 59-05-2, 7413-34-5;
     (paclitaxel) 33069-62-4; (politef) 9002-84-0, 9039-02-5; (poloxamer)
     9003-11-6; (polyacrylic acid) 74350-43-9, 87003-46-1, 9003-01-4,
     9003-04-7; (polycaprolactone) 24980-41-4, 25248-42-4; (polyglactin)
     26780-50-7, 34346-01-5; (polyglycolic acid) 26124-68-5; (polylactic acid)
     26100-51-6; (polyvinyl alcohol) 37380-95-3, 9002-89-5; (povidone)
     9003-39-8
CN
     capronor
NP
    dacron; dexon; polyglactin 910; teflon; vicryl
L271 ANSWER 66 OF 84 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                    1993257497 EMBASE
                                          Full-text
TITLE:
                    Biodegradable hydrogels in drug delivery.
AUTHOR:
                    Kamath K.R.; Park K.
CORPORATE SOURCE:
                    Dr. K. Park, Purdue University School Pharmacy, West
                    Lafayette, IN 47907, United States
SOURCE:
                    Advanced Drug Delivery Reviews, (Jul 1993) Vol. 11, No.
                    1-2, pp. 59-84.
                    Refs: 128
                    ISSN: 0169-409X CODEN: ADDREP
                    Netherlands
COUNTRY:
                    Journal; General Review; (Review)
DOCUMENT TYPE:
FILE SEGMENT:
                    027
                            Biophysics, Bioengineering and Medical
                            Instrumentation
                    030
                            Clinical and Experimental Pharmacology
                    037
                            Drug Literature Index
LANGUAGE:
                    English
SUMMARY LANGUAGE:
                    English
```

ENTRY DATE: Entered STN: 3 Oct 1993 Last Updated on STN: 3 Oct 1993 ED Entered STN: 3 Oct 1993 Last Updated on STN: 3 Oct 1993 AΒ Biodegradable hydrogels have been exploited in the controlled drug delivery area due to various advantages. This review describes different types of biiodegradable hydrogel systems, mechanisms and factors affecting their degradation, and their applications in drug delivery. Biodegradable hydrogels were classified according to their method of preparation, degradable moiety in the systems, and the mode of biodegradation. In addition, this review describes the advantages and limitations of these systems pertaining to their potential for future applications. CT Medical Descriptors: *biodegradation cross linking *drug delivery system *drug formulation *hydrogel hydrolysis ion exchange pharmaceutics priority journal review solubilization temperature Drug Descriptors: CT2 hydroxyethyl methacrylate: PR, pharmaceutics acrylic acid: PR, pharmaceutics carboxymethylcellulose: PR, pharmaceutics copolymer: PR, pharmaceutics itaconic acid: PR, pharmaceutics macrogol: PR, pharmaceutics maleic acid: PR, pharmaceutics methacrylic acid: PR, pharmaceutics n (2 hydroxypropyl) methacrylamide: PR, pharmaceutics n,n dimethylacrylamide: PR, pharmaceutics poly gamma benzyl glutamate: PR, pharmaceutics poly(2 hydroxyethyl glutamine): PR, pharmaceutics polyacrylamide: PR, pharmaceutics polyacrylic acid: PR, pharmaceutics polycaprolactone: PR, pharmaceutics polylactic acid: PR, pharmaceutics polymacon: PR, pharmaceutics polymer: PR, pharmaceutics polyvinyl acetate: PR, pharmaceutics polyvinyl alcohol: PR, pharmaceutics povidone: PR, pharmaceutics unclassified drug RN (2 hydroxyethyl methacrylate) 868-77-9; (acrylic acid) 10344-93-1, 79-10-7; (carboxymethylcellulose) 8050-38-2, 9000-11-7, 9004-32-4, 9050-04-8; (itaconic acid) 97-65-4; (macrogol) 25322-68-3; (maleic acid) 110-16-7, 18610-42-9; (methacrylic acid) 18358-13-9, 79-41-4; (n (2 hydroxypropyl)methacrylamide) 21442-01-3; (polyacrylamide) 9003-05-8; (polyacrylic acid) 74350-43-9, 87003-46-1, 9003-01-4, 9003-04-7; (polycaprolactone) 24980-41-4, 25248-42-4; (polylactic acid) 26100-51-6; (polymacon) 25053-81-0, 25249-16-5, 98932-78-6; (polyvinyl acetate) 9003-20-7; (polyvinyl alcohol) 37380-95-3, 9002-89-5; (povidone) 9003-39-8

Full-text

reserved on STN

ACCESSION NUMBER: 1978043222 EMBASE

TITLE: A comparative study of five materials for use in filling root canal spaces. AUTHOR: Fogel B.B. CORPORATE SOURCE: Univ. Pacific Sch. Dent., San Francisco, Calif., United States Oral Surgery Oral Medicine and Oral Pathology, (1977) Vol. SOURCE: 43, No. 2, pp. 284-299. ISSN: 0030-4220 CODEN: OSOMAE DOCUMENT TYPE: Journal; Article FILE SEGMENT: 037 Drug Literature Index LANGUAGE: English Medical Descriptors: СТ article *drug comparison *red pigment theoretical study *tooth *tooth root canal filling СТ Drug Descriptors: *2 hydroxyethyl methacrylate *2,2 bis(4 glycidyloxyphenyl)propane *acetic acid ah 26 filling material *benzoyl peroxide *bismuth oxide *bisphenol bismethacrylate *calcium sulfate cavit durelon *eugenol *magnesium oxide *methenamine *poly(methyl methacrylate) *polyacrylic acid *polyvinyl acetate *polyvinylchloride *silicon dioxide *silver *titanium dioxide *triethanolamine *triethylene glycol unclassified drug valnoctamide *zinc oxide *zinc sulfate zoe b and t RN (2 hydroxyethyl methacrylate) 868-77-9; (2,2 bis(4 glycidyloxyphenyl)propane) 1675-54-3; (acetic acid) 127-08-2, 127-09-3, 64-19-7, 71-50-1; (ah 26 filling material) 55599-25-2; (benzoyl peroxide) 94-36-0; (bismuth oxide) 12640-40-3, 1304-76-3; (calcium sulfate) 13397-24-5, 23296-15-3, 7778-18-9; (cavit) 66458-08-0; (durelon) 52051-57-7; (eugenol) 97-53-0; (magnesium oxide) 1309-48-4, 1317-74-4; (methenamine) 100-97-0, 24360-05-2; (poly(methyl methacrylate)) 39320-98-4, 9008-29-1; (polyacrylic acid) 74350-43-9, 87003-46-1, 9003-01-4, 9003-04-7; (polyvinyl acetate) 9003-20-7; (polyvinylchloride) 9002-86-2; (silicon dioxide) 10279-57-9, 14464-46-1, 14808-60-7, 15468-32-3, 60676-86-0, 7631-86-9; (silver) 7440-22-4; (titanium dioxide) 1317-70-0, 1317-80-2, 13463-67-7, 51745-87-0; (triethanolamine) 102-71-6,

637-39-8; (triethylene glycol) 112-27-6; (valnoctamide) 12704-74-4, 4171-13-5; (zinc oxide) 1314-13-2; (zinc sulfate) 7733-02-0 CN adaptic; ah 26; cavit; durelon; zoe b and t

L271 ANSWER 68 OF 84 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1998:116506 BIOSIS Full-text

DOCUMENT NUMBER: PREV199800116506

TITLE: Synthesis of monomeric and polymeric conjugates

carrying a thrombin inhibitor through an ester bond.

AUTHOR(S): Noguchi, Hiroshi; Iwata, Hiroo; Ikada, Yoshito [Reprint

author]

CORPORATE SOURCE: Res. Cent. Biomed. Eng., Kyoto Univ., 53 Kawahara-cho,

Shogoin, Sakyo-ku, Kyoto 606, Japan

SOURCE: Journal of Biomedical Materials Research, (March 15,

1998) Vol. 39, No. 4, pp. 621-629. print.

CODEN: JBMRBG. ISSN: 0021-9304.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 5 Mar 1998

Last Updated on STN: 6 Apr 1998

ED Entered STN: 5 Mar 1998

Last Updated on STN: 6 Apr 1998

Four kinds of monomers carrying a thrombin inhibitor, (2R, 4R)-4-methyl-1- (N-4R)AΒ ((3-methyl-1,2,3,4-tetrahydro-8-quinolinyl)sulfonyl)-L-arginyl)-2piperidinecarboxylic acid (argatroban), were synthesized. These monomers were copolymerized with acrylamide to yield water-soluble polymeric conjugates possessing the argatroban moiety in the side chain. Their antithrombogenic activities were determined from the inhibitory effect on thrombin action and the prolongation effect on blood clotting time. The monomeric conjugates of 2-hydroxyethyl acrylate (HEA), 2-hydroxyethyl methacrylate (HEMA), and 4hydroxybutyl acrylate (HBA) linked with argatroban through an ester bond were potent inhibitors of thrombin, prolonging the blood-clotting time, whereas a conjugate of amino methyl styrene (AMS) and argatroban through an amide bond was a less potent inhibitor than argatroban. None of the copolymers could prolong blood clotting when assessed just after preparation of their aqueous solutions, but the antithrombogenic activity of the aqueous solutions increased after incubation for 7 days at 37degree C for the polymeric conjugates through an ester bond. Free argatroban was detected in the aqueous solutions of polymeric conjugates after incubation, suggesting that argatroban was released by hydrolysis of the ester bond during incubation.

CC Blood - General and methods 15001

Biochemistry methods - General 10050

Biochemistry studies - General 10060

Biophysics - Molecular properties and macromolecules 10506

Movement 12100

Cardiovascular system - General and methods 14501

Cardiovascular system - Physiology and biochemistry 14504

Blood - Blood and lymph studies 15002

Blood - Blood cell studies 15004

Pharmacology - Drug metabolism and metabolic stimulators 22003

Pharmacology - Blood and hematopoietic agents 22008

Pharmacology - Cardiovascular system 22010

Biophysics - Methods and techniques 10504

IT Major Concepts

Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Pharmacology

IT Chemicals & Biochemicals

argatroban: antithrombogenic activity, heparin substitute, thrombin inhibitor; 2-hydroxyethyl acrylate: monomeric conjugate; 2-hydroxyethyl

10/824,298 methacrylate: monomeric conjugate; 4-hydroxybutyl acrylate: monomeric conjugate ΙT Miscellaneous Descriptors blood-clotting time; monomeric conjugate synthesis; polymeric conjugate synthesis RN 74863-84-6 (argatroban) 818-61-1 (2-hydroxyethyl acrylate) 868-77-9 (2-hydroxyethyl methacrylate) 2478-10-6 (4-hydroxybutyl acrylate) 9000-94-6 (THROMBIN INHIBITOR) 9005-49-6 (HEPARIN) L271 ANSWER 69 OF 84 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on ACCESSION NUMBER: 1989:8940 BIOSIS Full-text DOCUMENT NUMBER: PREV198987008940; BA87:8940 TITLE: STUDY OF DRUG MICROFORMS XIX. IN-VITRO KINETICS AND LIBERATION MECHANISMS OF PENTOXIFYLLINE FROM POLYACRYLATE ORAL DOSAGE FORMS. AUTHOR(S): BAUEROVA K [Reprint author]; RAK J KATEDRA GALENICKEJ FARMACIE FARMACEUTICKEJ FAKULTY UK, CORPORATE SOURCE: ODBOJAROV 10, 832 32 BRATISLAVA SOURCE: Farmaceuticky Obzor, (1988) Vol. 57, No. 9, pp. 389-398. CODEN: FAOBAS. ISSN: 0014-8172. DOCUMENT TYPE: Article FILE SEGMENT: LANGUAGE: SLOVAK ENTRY DATE: Entered STN: 6 Dec 1988 Last Updated on STN: 6 Dec 1988 Entered STN: 6 Dec 1988 ED Last Updated on STN: 6 Dec 1988 AΒ The influence of some polymer auxiliary materials on the kinetics and liberation mechanism of pentoxyifylline from the oral dosage forms has been studied. The solutions (R1, R2, R3) and the dispersions (E35, E36, E37) of 2hydroxyethyl-methacrylate/ butylacrylate copolymer containing the mentioned monomers in a different proportion have been evaluated. The pentoxifylline pellets have been prepared by coating with the tested polymers. The tablets containing 300 mg of the drug have been manufactured by direct compression of pellets. The release of the drug has been determined by PhBs IV dissolution test. The sustained release ability of studied polymers has been evaluated by the parameters of Weibull and Higuchi functions. The sustained release action has been caused by two factors: by the coating of pellets and by the type of polymer. The dispersion polymers proved to have better sustained release ability. The most suitable parameter for the evaluation of the drug release seemed to be the mean liberation time (MLTw). CC Biochemistry methods - General 10050 Biochemistry studies - General Biophysics - Methods and techniques 10504 Pharmacology - General 22002 Pharmacology - Drug metabolism and metabolic stimulators Routes of immunization, infection and therapy In vitro cellular and subcellular studies ΙT Major Concepts Biochemistry and Molecular Biophysics; Pharmacology Miscellaneous Descriptors ΤT 2 HYDROXYETHYLMETHACRYLATE-BUTYLACRYLATE

COPOLYMER PHARMACOKINETICS

868-77-9 (2-HYDROXYETHYLMETHACRYLATE)

6493-05-6 (PENTOXIFYLLINE)

RN

141-32-2D (BUTYLACRYLATE)

 $\ensuremath{\text{L}271}$ ANSWER 70 OF 84 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on

STN

ACCESSION NUMBER: 1987:226823 BIOSIS <u>Full-text</u>
DOCUMENT NUMBER: PREV198783114993; BA83:114993

TITLE: GLYCOL METHACRYLATE AS AN EMBEDDING MEDIUM FOR BONE.

AUTHOR(S): HOTT M [Reprint author]; MARIE P J

CORPORATE SOURCE: NATL INST HEALTH AND MED RES, UNIT 18, LARIBOISIERE HOSP,

75010 PARIS, FR

SOURCE: Stain Technology, (1987) Vol. 62, No. 1, pp.

51-58.

CODEN: STTEAW. ISSN: 0038-9153.

DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 22 May 1987

Last Updated on STN: 22 May 1987

ED Entered STN: 22 May 1987

Last Updated on STN: 22 May 1987

AΒ A simple and reliable procedure for embedding undecalcified trabecular bone tissue in noncommercial glycol methacrylate (GMA) has been developed. The embedding mixture includes a monomer, methacrylic acid hydroxyethyl ester; a copolymer, methacrylic acid butyl ester; a cross-linker, ethylene glycol dimethacrylate; a catalyst, Luperco; a chemical initiator (N, Ndimethylaniline) and, to avoid excessive elevation of temperature during polymerization, a heat moderator, α -terpinene. The appropriate proportions of these components have been selected to give specimens which can be easily sectioned with classical microtomes and which do not swell but spread evenly on a water surface. Since polymerization occurs at -4° C, the method allows demonstration of such enzymatic activities as acid and alkaline phosphatase and carbonic anhydrase. It provides excellent preservation of bone tissue and in studies of bone metabolism allows histomorphometry as well as visualization of fluorescent labeling and radioactive markers. The cost is significantly less than available commercial kits. In our hands glycol methacrylate is at present more useful than methyl methacrylate and is used in our laboratory for routine embedding of bone tissue.

CC Microscopy - Histology and histochemistry 01056

Cytology - Human 02508

Biochemistry studies - General 10060

External effects - Temperature as a primary variable - cold 10616 Bones, joints, fasciae, connective and adipose tissue - General and methods 18001

Bones, joints, fasciae, connective and adipose tissue - Physiology and biochemistry 18004

IT Major Concepts

Cell Biology; Methods and Techniques; Skeletal System (Movement and Support)

IT Miscellaneous Descriptors

HUMAN METHACRYLIC ACID HYDROXYETHYL ESTER
METHACRYLIC ACID BUTYL ESTER ETHYLENEGLYCOL
DIMETHACRYLATE LUPERCO HISTOMORPHOMETRY

ORGN Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN 868-77-9 (GLYCOL METHACRYLATE)

79-41-4 (METHACRYLIC ACID)

97-88-1 (METHACRYLIC ACID BUTYL ESTER) 97-90-5 (ETHYLENEGLYCOL DIMETHACRYLATE)

L271 ANSWER 71 OF 84 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED.

on STN DUPLICATE 2

ACCESSION NUMBER: 2002-0183377 PASCAL Full-text

COPYRIGHT NOTICE: Copyright .COPYRGT. 2002 INIST-CNRS. All rights

reserved.

Preparation of monolithic polymers with controlled TITLE (IN ENGLISH):

porous properties for microfluidic chip applications

using photoinitiated free-radical polymerization

CONG YU; MINGCHENG XU; SVEC Frantisek; FRECHET Jean M. AUTHOR:

J.

Department of Chemistry, University of California, 718 CORPORATE SOURCE:

Latimer Hall #1460, Berkeley, California 94720, United

States

SOURCE: Journal of polymer science. Part A. Polymer chemistry,

> (2002), 40(6), 755-769, 52 refs. ISSN: 0887-624X CODEN: JPLCAT

DOCUMENT TYPE: Journal BIBLIOGRAPHIC LEVEL: Analytic United States COUNTRY:

LANGUAGE: English

INIST-6199A1, 354000100264420040 AVAILABILITY:

20020425 UP

A broad variety of monolithic macroporous polymers with both controlled AΒ chemistry and porous properties was prepared using UV-initiated free-radical polymerization. The chemistry of the monoliths is defined by the composition of the monomer mixture used for the polymerization. The use of functional methacrylate monomers such as glycidyl methacrylate, 2-hydroxyethyl methacrylate, butyl methacrylate, 2-acrylamido-2-methyl-1-propanesulfonic acid, and [2-(methacryloyloxy) ethyl] trimethylammonium chloride enabled the preparation of monoliths with reactive, hydrophilic, hydrophobic, and ionizable functionalities, respectively. The porous properties of these monoliths were mainly affected by the choice of the porogenic solvent system. Because the UV polymerization was carried out at room temperature, even low molecular weight alcohols and other low boiling point solvents could safely be used to create a versatile series of binary porogenic mixtures. Monoliths were prepared in spatially defined positions using the photolithographic technique within a fused silica capillary and on microfluidic chips, and the former was demonstrated with the separation of derivatized amines by means of capillary electrochromatography in the reversed-phase mode. Similarly, a monolith prepared in the microchip format was used to demonstrate a microextraction with enrichment of a solution of green fluorescent protein by a factor of 1000.

Full-text ΑN 2002-0183377 PASCAL

Copyright .COPYRGT. 2002 INIST-CNRS. All rights reserved. CP

CC 001D09D02D; Applied sciences; Physicochemistry of polymers, Macromolecular chemistry, Materials science; Organic polymers

CCFR 001D09D02D; Sciences appliquees; Physicochimie des polymeres, Chimie macromoleculaire, Science des materiaux; Polymeres organiques

CCES 001D09D02D; Ciencias aplicadas; Fisicoquimica de los polimeros, Quimica macromolecular, Ciencia de los materiales; Polimeros organicos

СТ Glycidyl methacrylate copolymer; Hydroxyethyl methacrylate

copolymer; Butyl methacrylate copolymer; Acrylamide

derivative copolymer; Sulfonate copolymer; Quaternary ammonium copolymer; Crosslinked copolymer; Porous material; Macroporosity; Preparation; Photochemical copolymerization; Structure processing relationship; Pore size; Morphology; Specific surface area; Solvent effect; Mixed solvent; Experimental study

CTFR Methacrylate de glycidyle copolymere; Methacrylate d'hydroxyethyle copolymere; Methacrylate de butyle copolymere; Acrylamide derive copolymere; Sulfonate copolymere; Ammonium quaternaire copolymere; Copolymere reticule; Materiau poreux; Macroporosite; Preparation; Copolymerisation photochimique; Relation mise en oeuvre structure; Dimension pore; Morphologie; Aire surface specifique; Effet solvant; Solvant mixte; Etude experimentale; Materiau monolithique; Dimethacrylate d'ethylene copolymere; Methacrylate de 2-[trimethylammonio]ethyle copolymere

CTES Metacrilato de glicidilo copolimero; Metacrilato de hidroxietilo copolimero; Metacrilato de butilo copolimero; Acrilamida derivado copolimero; Sulfonato copolimero; Amonio cuaternario copolimero; Copolimero reticulado; Material poroso; Macroporosidad; Preparacion; Copolimerizacion fotoquimica; Relacion puesta en marcha estructura; Dimension poro; Morfologia; Efecto solvente; Disolvente mixto; Estudio experimental

L271 ANSWER 72 OF 84 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED.

on STN DUPLICATE 6

ACCESSION NUMBER: 1997-0504580 PASCAL Full-text

COPYRIGHT NOTICE: Copyright .COPYRGT. 1997 INIST-CNRS. All rights

reserved.

TITLE (IN ENGLISH): Endgroup-functionalized polytetrahydrofurans by

polymerization with functional triflate esters, 1

PolyTHF-macromonomers

AUTHOR: DUBREUIL M. F.; GOETHALS E. J.

CORPORATE SOURCE: Department of Organic Chemistry, Polymer Division,

University of Ghent, Krijgslaan 281, 9000 Ghent,

Belgium

SOURCE: Macromolecular chemistry and physics, (1997)

, 198(10), 3077-3087, 9 refs.

ISSN: 1022-1352

DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: Switzerland
LANGUAGE: English

AVAILABILITY: INIST-4111, 354000068381310080

UP 20001031

AΒ Functional esters of trifluoromethanesulfonic acid (triflate esters) have been synthesized by reaction of functional alcohols (allyl alcohol, 2hydroxyethyl acrylate (HEA) and methacrylate (HEMA), 4-hydroxybutyl acrylate (HBA)) with triflic anhydride in the presence of 2,6-di-tert-butylpyridine. These esters were used in situ as initiators for the polymerization of tetrahydrofuran (THF), with the purpose to synthesize endgroup-functionalized polyTHF's. The method was first tested with the system butanol/triflic anhydride. With this combination, quantitative formation of the ester and, subsequently, controlled polymerization of THF was realized. Similar results were obtained with the system allyl alcohol/triflic anhydride. With 2hydroxyethyl acrylate (HEA) and 2-hydroxyethyl methacrylate (HEMA), the synthesis of the triflate ester was accompanied by the formation of substantial amounts of ether formed by reaction of the triflate ester with a second molecule of alcohol. This was attributed to an enhanced reactivity of the triflate ester due to nucleophilic assistance by the carbonyl group in yposition. This assistance is not possible with 4-hydroxybutyl acrylate (HBA) and with this alcohol, the formation of the ester was almost quantitative. The synthesis of polyTHF acrylate macromonomer was successful with the latter system.

- AN 1997-0504580 PASCAL Full-text
- CP Copyright .COPYRGT. 1997 INIST-CNRS. All rights reserved.
- CC 001D09D02B; Applied sciences; Physicochemistry of polymers,

10/824,298 Macromolecular chemistry, Materials science; Organic polymers CCFR 001D09D02B; Sciences appliquees; Physicochimie des polymeres, Chimie macromoleculaire, Science des materiaux; Polymeres organiques 001D09D02B; Ciencias aplicadas; Fisicoquimica de los polimeros, Quimica macromolecular, Ciencia de los materiales; Polimeros organicos CTCationic catalyst; Sulfonate; Priming activity; Cationic polymerization; Ring opening polymerization; Tetrahydrofuran polymer; Macromer; Acrylic acid ester; Preparation; Experimental study CTFR Amorceur dationique; Sulfonate; Activite amorceur; Polymerisation cationique; Polymerisation ouverture cycle; Tetrahydrofurane polymere; Macromere; Acrylique acide ester; Preparation; Etude experimentale; Groupe acryloyle CTES Iniciador cationico; Sulfonato; Actividad trampa; Polimerizacion cationica; Polimerizacion abertura ciclo; Tetrahidrofurano polimero; Macromero; Acrilico acido ester; Preparacion; Estudio experimental Cyclic ether polymer ВΤ BTFR Ether cyclique polymere BTES Eter ciclico polimero L271 ANSWER 73 OF 84 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. DUPLICATE 7 1997-0038743 ACCESSION NUMBER: PASCAL Full-text COPYRIGHT NOTICE: Copyright .COPYRGT. 1997 INIST-CNRS. All rights reserved. Effect of co-monomer composition on the integrity of TITLE (IN ENGLISH): bioactive growth hormone released from novel PEMA based polymers AUTHOR: GOODWIN c. J.; DAVY K. W. M.; BRADEN M.; DOWNES S.; MARSHALL N. J. CORPORATE SOURCE: Department of Molecular Pathology, University College London, Windeyer Building, 46 Cleveland Street, London, W1P 6DB, United Kingdom; Department of Biomaterials in Relation to Dentistry, London Hospital Medical College,, United Kingdom; University of London IRC in Biomedical Materials, United Kingdom; Department of Human Morphology, Medical School, Queens Medical Centre, Nottingham, United Kingdom Journal of biomedical materials research, SOURCE: (1996), 32(4), 635-643, 29 refs. ISSN: 0021-9304 CODEN: JBMRBG DOCUMENT TYPE: Journal BIBLIOGRAPHIC LEVEL: Analytic COUNTRY: United States LANGUAGE: English AVAILABILITY: INIST-13764, 354000060765180170 UP 20001031 AΒ The release of human growth hormone (hGH) from hormone loaded bone cement was previously shown to enhance osteoid formation. hGH is a complex protein and its incorporation into such cements may compromise its bioactivity. We therefore characterized the release of hGH from a series of methacrylate systems based upon poly(ethylmethacrylate) (PEMA). Different mixtures of two

The release of human growth hormone (hGH) from hormone loaded bone cement was previously shown to enhance osteoid formation. hGH is a complex protein and its incorporation into such cements may compromise its bioactivity. We therefore characterized the release of hGH from a series of methacrylate systems based upon poly(ethylmethacrylate) (PEMA). Different mixtures of two monomers, hydroxyethylmethacrylate (HEMA) and n-butylmethacrylate (n-BM) were used to provide polymers with graded water uptakes. Exclusive use of only one of the monomers resulted in enhanced cytotoxicity and also reduced release of the bioactive hormone. Combinations of the monomers improved the recovery of bioactivity from the polymers and reduced their cytotoxicity. hGH released from the polymer with the lowest water uptake (100% n-BM, 0% HEMA) had an exceptionally low bioactivity: immunoactivity ratio, suggesting that

the bioactive site of the hormone is particularly susceptible to disruption when it is incorporated into this matrix. ΑN 1997-0038743 PASCAL Full-text Copyright .COPYRGT. 1997 INIST-CNRS. All rights reserved. CP CC 002B26N; Life sciences; Medical sciences; Biomedical engineering CCFR 002B26N; Sciences de la vie; Sciences medicales; Genie biomedical CCES 002B26N; Ciencias de la vida; Ciencias medicales; Ingenieria biomedica STH; Biomaterial; Dental cement; Active material; Polymer; Ethyl СТ methacrylate polymer; Cytotoxicity; Tumor cell; Animal; Water absorption; Delivery system; Chemical composition; Rat; Bioassay CTFR STH; Biomateriau; Ciment dentaire; Matiere active; Polymere; Methacrylate d'ethyle polymere; Cytotoxicite; Cellule tumorale; Animal; Absorption eau; Systeme administration; Composition chimique; Rat; Essai biologique; Methacrylate d'hydroxyethyle monomere CTES STH; Biomaterial; Cemento dentario; Materia activa; Polimero; Metacrilato de etilo polimero; Citotoxicidad; Celula tumoral; Animal; Absorcion aqua; Sistema administracion; Composicion quimica; Rata; Prueba biologica Rodentia; Mammalia; Vertebrata; Adenohypophyseal hormone; Protein hormone BTFR Rodentia; Mammalia; Vertebrata; Hormone adenohypophysaire; Hormone proteine BTES Rodentia; Mammalia; Vertebrata; Hormona adenohipofisaria; Hormona proteina L271 ANSWER 74 OF 84 APOLLIT COPYRIGHT 2008 FIZ KA on STN 2002:7459 APOLLIT Full-text ACCESSION NUMBER: TITLE: Thermal degradation behaviour of 2hydroxyethyl methacrylate-tertbutyl acrylate copolymers AUTHOR: Martinez, G.; Sanchez-Chaves, M.; Rocha, C.M.; Ellis, G. (Instituto de Ciencia y Tecnologia de Polimeros (CSIC), Madrid (ES)) Polymer Degradation and Stability (2002) v. SOURCE: 76(2), p. 205-210 CODEN: PDSTDW ISSN: 0141-3910 DOCUMENT TYPE: Journal LANGUAGE: English UP The thermal degradation behaviour of 2-hydroxyethyl methacrylate-tert-butyl AΒ acrylate (REMA-TBA) copolymers has been studied using thermogravimetry under nitrogen atmosphere and IR microscopy. An almost perfect correlation is observed between experimental and theoretical data for the elimination of the tert-butyl moeity. The thermal stability of the copolymers decreases on increasing HEMA content. (orig.) CC *3830 Copolymers 1140 Acrylic and methacrylic polymers 3550 Thermolysis *3830 Copolymere 1140 Acryl- und Methacrylpolymere 3550 Abbau, thermischer CTDEGRADATION, THERMAL; ACRYLIC POLYMERS (METHACRYLIC); ACRYLIC ACID ESTERS; ACRYLICS (METHACRYLICS); AZOBISISOBUTYRONITRILE; BUTYL; COPOLYMERS; COPOLYMERIZATION; DIMETHYLFORMAMIDE; HYDROXYETHYL METHACRYLATE; IR SPECTROSCOPY; CATALYSTS; CONSTITUTION; SOLVENTS; MONOMERS; NMR; POLYMERIZATION TEMPERATURE; PROTONS; RADICAL POLYMERIZATION; STABILITY, THERMAL; NITROGEN; TEMPERATURE; THERMOGRAVIMETRY; TIME CTDE ABBAU, THERMISCHER; ACRYLPOLYMERE (METHACRYL); ACRYLSAEUREESTER; ACRYLVERBINDUNGEN (METHACRYL); AZOBISISOBUTYRONITRIL; BUTYL; COPOLYMERE;

COPOLYMERISATION; DIMETHYLFORMAMID; HYDROXYETHYLMETHACRYLAT;

IR-SPEKTROSKOPIE; KATALYSATOREN; KONSTITUTION; LOESUNGSMITTEL; MONOMERE;

NMR; POLYMERISATIONSTEMPERATUR; PROTONEN; RADIKALISCHE POLYMERISATION; STABILITAET, THERMISCHE; STICKSTOFF; TEMPERATUR; THERMOGRAVIMETRIE; ZEIT degradation of 2-HEMA/tert-BA copolymers

L271 ANSWER 75 OF 84 APOLLIT COPYRIGHT 2008 FIZ KA on STN

ACCESSION NUMBER: 1997:11411 APOLLIT Full-text

TITLE: Endgroup-functionalized polytetrahydrofurans by

polymerization with functional triflate esters. 1.

PolyTHF-macromonomers

AUTHOR: Dubreuil, M.F.; Goethals, E.J.

SOURCE: Macromol. Chem. Phys. (1997) 198(10),

p.3077-3087, 11p,13f,91

CODEN: MCHPES

DOCUMENT TYPE: Journal LANGUAGE: English

UP 19980123

AΒ Functional esters of trifluoromethanesulfonic acid (triflate esters) have been synthesized by reaction of functional alcohols (allyl alcohol, 2hydroxyethyl acrylate (HEA) and methacrylate (HEMA), 4-hydroxybutyl acrylate (HBA)) with triflic anhydride in the presence of 2,6-di-tert-buytlpyridine. These esters were used in situ as initiators for the polymerization of tetrahydrofuran (THF) with the purpose to synthesize endgroup-functionalized polyTHFs. The method was first tested with the system butanol/triflic anhydride. With this combination, quantitative formation of the ester and, subsequently, controlled polymerization of THF was realized. Similar results were obtained with the system allyl alcohol/triflic anhydride. With 2hydroyethyl acrylate (HEA) and 2-bydroxyethyl methacrylate (HEMA), the synthesis of the triflate ester was accompanied by the formation of substantial amounts of ether formed by reaction of the triflate ester with a second molecule of <u>alcohol</u>. This was attributed to an enahnced reactivity of the triflate ester due to nucleophilic assistance by the carbonyl group in gamma-position. This assistance is not possibole with 4-hydroxybutyl acrylate (HBA) and with this alcohol, the formation of the ester was almost quantitative, The synthesis of polyTHF acrylate macromonomer was successful with the latter system. (author abstract).

CC *1182 Polyethers

3208 Ring-opening polymerization

3230 Catalysts

3852 Telechelic polymers

CCDE *1182 Polyether

3208 Polymerisation unter Ringoeffnung

3230 Katalysatoren

3852 Telechele Polymere

CT ALLYL; CATALYSTS; CATIONS; END GROUPS; HYDROXYETHYL ACRYLATE;
HYDROXYETHYL METHACRYLATE; IONIC POLYMERIZATION; MACROMERS; MOLECULAR
WEIGHT; NMR; POLYOXYTETRAMETHYLENE; RING-OPENING POLYMERIZATION; SULFONIC
ACIDS; TELECHELIC POLYMERS; TETRAHYDROFURAN

CTDE ALLYL; ENDGRUPPEN; HYDROXYETHYLACRYLAT; HYDROXYETHYLMETHACRYLAT; IONISCHE POLYMERISATION; KATALYSATOREN; KATIONEN; MAKROMERE; MOLEKULARGEWICHT; NMR; POLYMERISATION UNTER RINGOEFFNUNG; POLYOXYTETRAMETHYLEN; SULFONSAEUREN; TELECHELE POLYMERE; TETRAHYDROFURAN

ST functionalized triflates as cationic initiators

=> d ibib ed ab ind 76
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE,
EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS'
- CONTINUE? (Y)/N:y

L271 ANSWER 76 OF 84 CEABA-VTB COPYRIGHT 2008 DECHEMA on STN

ACCESSION NUMBER: 2002(03):0436 CEABA-VTB FILE SEGMENT V Full-text

DOCUMENT NUMBER: PVTB: 0125/179

TITLE: Cycloaliphatic epoxide crosslinkable core-shell

latexes: A new strategy for waterborne epoxide

coatings

Cycloaliphatische Epoxide, vernetzbar mit

schalenkernartig verknuepften Latexderivaten: Eine neue Strategie fuer waessrige Epoxidharzbeschichtungen

AUTHOR: Soucek, M.D.; Teng, G.; Wu, S.

CORPORATE SOURCE: North Dakota State Univ., Fargo, ND, USA SOURCE: Journal of Coatings Technology (2001)

73(921), 26 Reference(s), 117-125, 8f, 7t

CODEN: JCTEDL ISSN: 0361-8773

LANGUAGE: English

ED 20020517

Coating formulations are increasingly becoming aqueous-based replacing the AΒ organic solvent-based formulations. Glycidyl type of epoxides can form a baked thermoset coating. Seed oil epoxides incorporated into cycloaliphatic structure do not show satisfactory performance. This report discusses methods of preparing thermosetting acrylic latex, which has cross-linked cycloaliphatic epoxide and is based on a core shell approach. The core is having hydroxyl groups and the shell is stabilized with carboxyl groups. The recipe for core consists of methyl methacrylate, 2-hydroxymethyl methacrylate, <u>butyl acrylate</u> as monomer pre-emulsion and ammonium per sulfate as initiator. The shell was made using methyl methacrylate, butyl acrylate and methacrylic acid as monomer pre-emulsion and a redox initiator. During setting, the carboxyl and the hydroxyl groups cross link and eventually the cycloaliphatic di-epoxide and carboxyl groups are expected to react. The latex morphology, the reaction conditions and the mode of addition of the diepoxide for cross linkages have been varied to study the effects on stability of the latex film. The core shell approach gives latex that is better than other cycloaliphatic epoxides.(informindia)

FS V

CC 3PLG Production of organic chemical final products 3PLC Chemical reactions, chemical reaction engineering

3KXU Chemical properties of materials, corrosion/erosion behaviour

CCDE 3PLG Herstellung von organischen chemischen Endprodukten

3PLC chemische Reaktionen, Reaktionsfuehrung

3KXU chemische Werkstoffeigenschaften, Korrosions- und Erosionsverhalten

CT coating; Methyl methacrylate; methacrylic acid; Polymer coating; Butyl acrylate; epoxy resin; 2-hydroxymethyl methacrylate

CTDE Spaetpotential

=> d ibib ed ab ind 77-84

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' - CONTINUE? (Y)/N:y

L271 ANSWER 77 OF 84 BIOENG COPYRIGHT 2008 CSA on STN DUPLICATE 5

ACCESSION NUMBER: 2004039588 BIOENG Full-text

DOCUMENT NUMBER: 490205

TITLES: Estrogenic activity of chemicals for dental and similar

use in vitro

AUTHOR: Hashimoto, Y; Moriguchi, Y; Oshima, H; Nishikawa, J;

Nishihara, T; Nakamura, M

CORPORATE SOURCE: Osaka Dental Univ, Osaka, Jpn

SOURCE: Journal of Materials Science: Materials in Medicine [J

MATER SCI MATER MED]. Vol. 11, no. 8, pp. 465-468. Aug

2000.

Published by: KLUWER ACADEMIC PUBLISHERS, DORDRECHT,

(NETHERLANDS)
ISSN: 0957-4530

DOCUMENT TYPE: Journal LANGUAGE: English

UP 20040602

AΒ The estrogenic activities of chemicals for dental and similar use were tested by a reporter gene assay (yeast two-hybrid system) and an estrogen/estrogen receptor (ER- alpha) competition binding assay (fluorescence polarization system). Among the 10 chemicals [bisphenol-A (BPA), bis-2-hydroxypropyl methacrylate (Bis-GMA), triethylene glycol dimethacrylate (TEGDMA), methyl methacrylate (MMA) and 2-hydroxyethyl methacrylate (HEMA), dibutyl phthalate (DBP), n-butyl benzyl phthalate (BBP), n-butyl phthalyl n-butyl glycolate (BPBG), di-2-ethylhexyl phthalate (DEHP), and di-2-ethylhexyl adipate (DOA)], which were diluted with DMSO to concentrations ranging from 5x10 super(-7) to 5x10 super(-3) M, and 17 beta -estradiol (E2) as a positive control, BPA and BBP showed estrogenic activity in these two assays, while the remaining eight chemicals did not at the concentrations tested. Additional data, together with in vivo and epidemiological examinations, are required. Such investigations should also provide information on the validity of these methods for testing the estrogenic activity of chemicals.

AN 2004039588 BIOENG Full-text

CC 462.3 Dental Equipment and Supplies; 461.6 Medicine; 801 Chemistry; 461.2 Biological Materials; 801.2 Biochemistry; 822.3 Food Products

CT Bioassay; Hormones; Yeast; Fluorescence; Light polarization

UT Estrogenic activity

L271 ANSWER 78 OF 84 BIOTECHDS COPYRIGHT 2008 THE THOMSON CORP. on STN

ACCESSION NUMBER: 1984-09872 BIOTECHDS Full-text

TITLE: Effect of the hydrophilicity of the polymer matrix on

immobilized alpha-chymotrypsin;

immobilization by radiation polymerization

AUTHOR: Kumakura M; Kaetsu I

LOCATION: Takasaki Radiation Chemistry Research Establishment, Japan

Atomic Energy Research Institute, Takasaki, Gunma, Japan.

SOURCE: Collect.Czech.Chem.Commun.; (1984) 49, 6, 1552-56

CODEN: CCCCAK

DOCUMENT TYPE: Journal LANGUAGE: English

Alpha-chymotrypsin (EC-3.4.21.1) was immobilized by shaking on acrylate monomer-enzyme solution, cooling to -78 deg and irradiating the mixture with 1.0 Mrad of gamma-rays from a 60Co source. The polymerized matrix with the immobilized enzyme was cut into thin pellets. The following monomers were used; 2-hydroxyethyl methacrylate; 2-hydroxyethyl acrylate; 1,3-butyleneglycoldimethacrylate; neopentyl glycol dimethacrylate; and tetradecaethyleneglycol dimethacrylate. The activity and thermal stability of the immobilized chymotripsin increased with increasing hydrophilicity of the polymer matrix or monomer. The thermal stability was affected by the form and pore size of the matrix. Chymotrypsin immobilized on a soft-gel polymer matrix exhibited an enhanced thermal stability. (-5 ref)

- AN 1984-09872 BIOTECHDS <u>Full-text</u>
- CC K BIOCATALYSIS; K2 Application
- CT ALPHA-CHYMOTRYPSIN IMMOBILIZATION, POLYMER MATRIX SUPPORT, HYDROPHILICITY EFFECT ON ACT. AND THERMAL STABILITY

 ${\tt L271}$ ANSWER 79 OF 84 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on

STN

ACCESSION NUMBER: 2000:23144 SCISEARCH Full-text

THE GENUINE ARTICLE: 268CR

TITLE: A study of three-phase structures in ABC triblock

copolymers

AUTHOR: Tanaka Y; Hasegawa H; Hashimoto T; Ribbe A; Sugiyama K;

Hirao A; Nakahama S (Reprint)

CORPORATE SOURCE: Kyoto Univ, Grad Sch Engn, Dept Polymer Chem, Sakyo Ku,

Yoshida Honmachi, Kyoto 6068501, Japan (Reprint); Kyoto Univ, Grad Sch Engn, Dept Polymer Chem, Sakyo Ku, Kyoto 6068501, Japan; Tokyo Inst Technol, Dept Polymer Chem,

Meguro Ku, Tokyo 1528552, Japan

COUNTRY OF AUTHOR: Japan

SOURCE: POLYMER JOURNAL, (1999) Vol. 31, No. 11, Part 2,

pp. 989-994. ISSN: 0032-3896.

PUBLISHER: SOC POLYMER SCIENCE JAPAN, TSUKIJI DAISAN NAGAOKA BLDG,

2-4-2 TSUKIJI, CHUO-KU, TOKYO, 104, JAPAN.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English REFERENCE COUNT: 18

ENTRY DATE: Entered STN: 2000

Last Updated on STN: 2000

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

ED Entered STN: 2000

Last Updated on STN: 2000

The microdomain structure of an ABC triblock copolymer consisting of AΒ poly(2-bydroxyethyl methacrylate), poly(tert-butyl methacrylate) and poly(2-(perfluorobuty1) ethyl methacrylate) was investigated by means of small-angle X-ray scattering (SAXS) and energy-filtered transmission electron microscopy (EF-TEM) which is based on inelastically scattered electrons by a specific element (F atoms in this case) and known as element spectroscopic imaging (ESI). A three-phase lamellar structure was observed with good contrast for an unstained ultrathin section of the as-cast film of the triblock copolymer by imaging the inelastically scattered electrons at energy-loss of 100 eV. The microdomain structure can be interpreted in accordance with the EF-TEM result. A peculiar SAXS profile where the intensity of the first-order peak was weaker than that of the second-order was observed for the triblock copolymer. Theoretical calculation of the SAXS intensity with a paracrystal model of the four-layer lamellae successfully reproduced the observed SAXS profile.

CC POLYMER SCIENCE

ST Author Keywords: ABC triblock copolymer; microphase separation; transmission electron microscopy; small-angle X-ray scattering; element spectroscopic imaging

STP KeyWords Plus (R): BLOCK-COPOLYMERS; MICRODOMAINS; MORPHOLOGY; POLYMERS *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*

L271 ANSWER 80 OF 84 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:826710 SCISEARCH Full-text

THE GENUINE ARTICLE: 250HF

TITLE: Synthesis of alkoxycarbene-containing polymers and their

application as polymeric catalysts for phenylacetylene

polymerization

AUTHOR: Nomura R (Reprint); Watanabe K; Masuda T

CORPORATE SOURCE: Kyoto Univ, Grad Sch Engn, Dept Polymer Chem, Kyoto

6068501, Japan (Reprint)

COUNTRY OF AUTHOR: Japan

SOURCE: POLYMER BULLETIN, (SEP-OCT 1999) Vol. 43, No.

2-3, pp. 177-182. ISSN: 0170-0839.

PUBLISHER: SPRINGER-VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 17

ENTRY DATE: Entered STN: 1999

Last Updated on STN: 1999

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

ED Entered STN: 1999

Last Updated on STN: 1999

AB Polymers having Fischer-type alkoxycarbenes in the side chain were

synthesized by the reaction of pendant hydroxy groups with

pentacarbonyltungsten acetoxyphenylcarbene [(CO)(5)W=C(Ph)O2CCH3, 2].

Namely, copolymers of methyl <u>methacrylate</u> with 4- <u>bydroxybutyl methacrylate</u> [poly(MMA-co-HBMA), 3b] were prepared and subjected to the reaction with 2

derived from tetramethylammonium salt of pentacarbonyltungsten

hydroxyphenylcarbene [(CO)(5)W=C(Ph)ON(CH3)(4), 1] with acetyl chloride. Soluble copolymers (4b) with pendant metal-carbene segments were obtained, and H-1 NMR and UV spectroscopic analyses indicated that the metal-carbene moiety was introduced onto 20-70% of hydroxy groups of the copolymers. In contrast, the introduction of carbene moiety into a copolymer of MMA with 20

because no reaction with 2 took place. The formed polymer (4b) served as a polymeric catalyst for the polymerization of phenylacetylene under the

-hydroxyethyl methacrylate [poly(MMA-co- HEMA), 3a] was unsuccessful

photo-irradiation.

CC POLYMER SCIENCE

STP KeyWords Plus (R): AMINOCARBENE COMPLEXES; METAL CARBENES; CHROMIUM; MOLYBDENUM; INITIATORS; ALKYNES

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

 ${\tt L271}$ ANSWER 81 OF 84 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on

STN

ACCESSION NUMBER: 1997:502748 SCISEARCH Full-text

THE GENUINE ARTICLE: XH536

TITLE: Water uptake and protein release characteristics of a new

methacrylate-based polymer system

AUTHOR: Scotchford C A (Reprint); Sim B; Downes S; Braden M

CORPORATE SOURCE: UNIV NOTTINGHAM, SCH MED, QUEENS MED CTR, DEPT HUMAN

MORPHOL, NOTTINGHAM NG7 2UH, ENGLAND (Reprint); RNOHT, IRC

BIOMED MAT, INST ORTHOPAED, STANMORE HA7 4LP, MIDDX,

ENGLAND

COUNTRY OF AUTHOR: ENGLAND

SOURCE: POLYMER, (<u>JUL 1997</u>) Vol. 38, No. 15, pp.

3869-3874.

ISSN: 0032-3861.

PUBLISHER: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE,

KIDLINGTON, OXFORD, OXON, ENGLAND OX5 1GB.

DOCUMENT TYPE: Article; Journal

21

FILE SEGMENT: PHYS LANGUAGE: English

ENTRY DATE: Entered STN: 1997

Last Updated on STN: 1997

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

ED Entered STN: 1997

REFERENCE COUNT:

Last Updated on STN: 1997

AΒ A novel polymer system comprising poly(ethyl methacrylate) (PEMA) powder gelled with hydroxyethyl- methacrylate (HEMA), n-butylmethacrylate (nBM) monomer mixtures has been produced. The monomers were combined in different ratios to vary the relative hydrophobicity of the system. Surface and bulk properties of this copolymer system were investigated. Surfaces were relatively featureless with little variation due to composition. Contact angles ranged from 76 to 83 degrees. Equilibrium water content of the polymers was directly related to the mole fraction of HEMA content. The uptake of water in the earlier stages was proportional to t(1/2), consistent with a diffusion process; the slope of this plot enabled diffusion coefficients to be measured. maximum equilibrium water content was 16%. Water uptake was reduced in phosphate-buffered saline, but addition of bovine serum albumin did not affect water uptake. Desorption was also linear on a t(1/2) plot in the early stages. There was a direct relationship between water uptake and loss. The polymer system was capable of releasing albumin; the amount of albumin released was inversely related to the HEMA content of the system. The relationship of the properties of the polymer system to biological interactions and potential applications are discussed. (C) 1997 Elsevier Science Ltd.

CC POLYMER SCIENCE

ST Author Keywords: poly (ethylmethacrylate); hydroxyethyl methacrylate; n-butyl methacrylate; equilibrium water content; protein release

STP KeyWords Plus (R): HETEROCYCLIC METHACRYLATES; CLINICAL-APPLICATIONS; GROWTH-HORMONE; MECHANICAL-PROPERTIES; BIOLOGICAL RESPONSE; BONE-CEMENT; SURFACES; FIBRONECTIN; ADHESION

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L271 ANSWER 82 OF 84 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1992:227662 SCISEARCH Full-text

THE GENUINE ARTICLE: HM355

TITLE: PERIODIC ACID INCUBATION CAN REPLACE HYDROCHLORIC-ACID

HYDROLYSIS AND TRYPSIN DIGESTION IN IMMUNOGOLD - SILVER STAINING OF BROMODEOXYURIDINE INCORPORATION IN PLASTIC

SECTIONS AND ALLOWS THE PAS REACTION

AUTHOR: VANDEKANT H J G (Reprint); DEROOIJ D G

CORPORATE SOURCE: UNIV UTRECHT, SCH MED, DEPT CELL BIOL, POB 80157, 3508 TD

UTRECHT, NETHERLANDS (Reprint)

COUNTRY OF AUTHOR: NETHERLANDS

SOURCE: HISTOCHEMICAL JOURNAL, (MAR 1992) Vol. 24, No.

3, pp. 170-175. ISSN: 0018-2214.

PUBLISHER: CHAPMAN HALL LTD, 2-6 BOUNDARY ROW, LONDON, ENGLAND SE1

8HN.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE LANGUAGE: English

REFERENCE COUNT: 31

ENTRY DATE: Entered STN: 1994

Last Updated on STN: 1994

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

ED Entered STN: 1994

Last Updated on STN: 1994

AB We have examined the possibility of improving the present methods of detecting bromodeoxyuridine (BrdU) and for combining the PAS reaction with the BrdU detection by means of immunogold-silver staining (IGSS). This was done in testes fixed in Carnoy or Bouin, and in parts of the small intestine which were fixed in Carnoy or periodate-lysine-paraformaldehyde (PLP). All tissues were embedded in a mixture of glycol methacrylate and

butanediol-monoacrylate. It was found to be impossible to carry out BrdU detection using HCl hydrolysis and trypsin digestion in combination with a PAS reaction. However, incubation of the plastic sections in periodic acid for a period of 30 minutes appeared to make it possible to eliminate the HCl denaturation step and to carry out a specific PAS reaction. Moreover, after incubation in periodic acid, trypsin digestion was no longer required to make the BrdU label accessible in GMA-embedded sections, nor to reexpose the antigenic sites in plastic sections of tissues fixed with crosslinking fixatives. In this way the loss of cell structures, which is inevitable when trypsin is used, can be avoided, Now a BrdU detection with improved morphology can be combined with the PAS reaction in the same plastic section in order to stain tissue carbohydrates. This is important for tumour diagnosis, where the PAS reaction can be very useful.

CC CELL BIOLOGY

STP KeyWords Plus (R): PARAFFIN-EMBEDDED TISSUE; S-PHASE CELLS;
IMMUNOHISTOCHEMICAL DETECTION; IMMUNOELECTRON MICROSCOPY; COLLOIDAL GOLD;
DNA-SYNTHESIS; PROTEIN-A; FIXATION; LOCALIZATION; KINETICS
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L271 ANSWER 83 OF 84 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1991:688601 SCISEARCH Full-text

THE GENUINE ARTICLE: GU703

TITLE: MISCIBILITY OF POLY(N-VINYL-2-PYRROLIDONE) WITH (METHYL-

METHACRYLATE) (2-HYDROXYETHYL METHACRYLATE) AND (NORMAL-BUTYL METHACRYLATE) (2-HYDROXYETHYL

METHACRYLATE) COPOLYMERS

AUTHOR: LEE S Y; LOW M Y; GOH S H (Reprint)

CORPORATE SOURCE: NATL UNIV SINGAPORE, DEPT CHEM, SINGAPORE 0511, SINGAPORE

(Reprint)

COUNTRY OF AUTHOR: SINGAPORE

SOURCE: EUROPEAN POLYMER JOURNAL, (1991) Vol. 27, No.

12, pp. 1379-1381. ISSN: 0014-3057.

PUBLISHER: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD

LANE, KIDLINGTON, OXFORD, ENGLAND OX5 1GB.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: PHYS LANGUAGE: English

REFERENCE COUNT: 23

ENTRY DATE: Entered STN: 1994

Last Updated on STN: 1994

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

ED Entered STN: 1994

Last Updated on STN: 1994

The miscibility of poly(N-vinyl-2-pyrrolidone) (PVP) with (methyl methacrylate)/(2-hydroxyethyl methacrylate) (MMA/HEMA) and (n-butyl methacrylate)/(2- hydroxyethyl methacrylate) (BMA/HEMA) copolymers was studied. While PVP is immiscible with poly (methyl methacrylate), it is miscible with a MMA/HEMA copolymer containing 1.9 mol% of HEMA. PVP is immiscible with a BMA/HEMA copolymer containing 13.9 mol% of HEMA and its miscibility with a BMA/HEMA copolymer containing 17.4 mol% of HEMA is composition dependent. However, PVP is completely miscible with BMA/HEMA copolymers having HEMA contents of 20.9, 23.4 and 27.5 mol%. The results show that, as the size of the pendant ester groups becomes larger, the polymethacrylate requires the incorporation of a larger amount of HEMA to achieve miscibility with PVP.

CC POLYMER SCIENCE

STP KeyWords Plus (R): COMPATIBLE POLYMER BLENDS; POLYMETHACRYLATES; BEHAVIOR;

EPICHLOROHYDRIN; POLYACRYLATES; PYRROLIDONE)
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L271 ANSWER 84 OF 84 DISSABS COPYRIGHT (C) 2008 ProQuest Information and

Learning Company; All Rights Reserved on STN

ACCESSION NUMBER: 95:48983 DISSABS Order Number: AAI9528476

TITLE: STRUCTURE-PROPERTY RELATIONSHIPS OF NOVEL POLYMER NETWORKS:

PART 1. AMPHIPHILIC NETWORKS. PART 2. INTERPENETRATING

BIMODAL NETWORKS (DIMETHYLSILOXANE, ISOBUTYLENE)

AUTHOR: PARK, DONGKYU [PH.D.]

CORPORATE SOURCE: THE UNIVERSITY OF AKRON (0003)

SOURCE: Dissertation Abstracts International, (1995) Vol.

56, No. 4B, p. 2053. Order No.: AAI9528476. 154 pages.

DOCUMENT TYPE: Dissertation

FILE SEGMENT: DAI LANGUAGE: English

ENTRY DATE: Entered STN: 19951031

Last Updated on STN: 19951031

ED Entered STN: 19951031

Last Updated on STN: 19951031

AΒ Surface and bulk properties of two types of amphiphilic networks, poly(2-bydroxyethyl methacrylate) 1- polyisobutylene (PHEMA-1-PIB, hereafter referred to as H-network) and poly(N,N-dimethylacrylamide)-1polyisobutylene (PDMAAm-1-PIB, hereafter referred to as A-network), were investigated. According to x-ray photoelectron spectroscopy C\$\sb{\rm 1s}\$ spectra, O/C and N/C ratios were considerably lower at the outermost surface (\$\sim\$80 A) than in the bulk of the networks. The surface morphologies of amphiphilic networks of various compositions were investigated by atomic force microscopy (AFM). AFM showed that the surface microroughness greatly increased by swelling in both water and n-heptane, suggesting surface heterogeneity. Tensile properties of the networks are dominated by the presence of PIB. Tensile strengths decreased by swelling with the decrease being more severe by swelling in water than in n-heptane. Elongations increased by swelling in water; however, the change was inconsistent upon swelling in n-heptane. According to small angle X-ray scattering, average interdomain spacings decreased with increasing PIB content, and the spacings of A-networks were smaller than those of H-networks. Dynamic mechanical analysis (DMA) showed that the T\sb{\rm g}$$'s of the respective hydrophilic and hydrophobic components shift toward each other with increasing PIB content. A 'liquid-liquid transition' (T) above the T) above the Tq}\$ of the hydrophilic component was apparent by DMA but could not be found by DSC. The T\$\sb{11}\$ is probably due to the PIB dangling chains. Two types of interpenetrating (IPN) poly (dimethylsiloxane) (PDMS) bimodal networks, sequential and simultaneous IPN's, were prepared, and their tensile and dynamic mechanical properties and transition behavior were compared with unimodal and interconnected bimodal networks. Of these three types of bimodal networks the simultaneous IPN showed highest extensibility and lowest tensile strength, with the highest tensile strength for the interconnected network. At room temperature the sequential IPN and interconnected networks showed higher moduli than the unimodal and simultaneous networks, but below the melting point (ca. \$-40\sp\circ\$C) the former have a lower modulus, most likely due to the higher degree of crystallinity of the latter. However, the glass transition temperatures and damping properties of these networks were similar.

CC 0495 CHEMISTRY, POLYMER

```
=> d que nos 177
L55 ( 1)SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L56
              SEL PLU=ON L55 1- RN: 8 TERMS
             8) SEA FILE=REGISTRY ABB=ON PLU=ON L56
L57 (
            14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
L58 (
               03)X"/MF
L59 (
              1) SEA FILE=REGISTRY ABB=ON PLU=ON L57 AND L58
L60 (
            177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
L61 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L60 AND PMS/CI
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L61 OR L59
L62 (
L63
                STR
L64
                STR
L65
                SCR 2043
L66 (
          414) SEA FILE=REGISTRY SSS FUL (L65 AND L64 AND L63)
L67 (
          414) SEA FILE=REGISTRY ABB=ON PLU=ON L59 OR L62 OR L66
L68 (
             0) SEA FILE=REGISTRY ABB=ON PLU=ON L67 AND RELATED POLYMERS/FA
          414)SEA FILE=REGISTRY ABB=ON PLU=ON L68 OR L67 414)SEA FILE=REGISTRY ABB=ON PLU=ON (L67 OR L69)
L69 (
L70 (
L71
               QUE ABB=ON PLU=ON BEKELE, H?/AU
                QUE ABB=ON PLU=ON DECKNER, G?/AU
L72
L73
                QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS, SO, PA
           244) SEA FILE=HCAPLUS ABB=ON PLU=ON L70
L74 (
L75 (
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON L74 AND (L71 OR L72 OR L73)
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND L75
L76 (
L77
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L75 OR L76)
=> d que 1157
L153
                OUE ABB=ON PLU=ON BEKELE, H?/AU
                QUE ABB=ON PLU=ON DECKNER, G?/AU
L154
                QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS, SO, PA
L155
L156(
           1107) SEA FILE=WPIX ABB=ON PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022
                OR H0033)/PLE
              8 SEA FILE=WPIX ABB=ON PLU=ON L156 AND (L153 OR L154 OR L155)
T-157
=> d his 1195
     (FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 09:07:39 ON 14 MAR 2008)
             1 S L194 AND L101-L103
L195
=> d que nos 1195
             1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L23 (
L24
               SEL PLU=ON L23 1- RN: 8 TERMS
             8) SEA FILE=REGISTRY ABB=ON PLU=ON L24
L25 (
L26 (
             14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
               03)X"/MF
L27 (
             1) SEA FILE=REGISTRY ABB=ON PLU=ON L25 AND L26
L28 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
               N
L29 (
            177) SEA FILE=REGISTRY ABB=ON PLU=ON L28 AND PMS/CI
L30 (
            177) SEA FILE=REGISTRY ABB=ON PLU=ON L29 OR L27
L31
                STR
L32
                STR
L33
                SCR 2043
          414)SEA FILE=REGISTRY SSS FUL (L33 AND L32 AND L31)
414)SEA FILE=REGISTRY ABB=ON PLU=ON L27 OR L30 OR L34
L34 (
L35 (
            0)SEA FILE=REGISTRY ABB=ON PLU=ON L35 AND RELATED POLYMERS/FA
L36 (
```

```
L37 (
           414) SEA FILE=REGISTRY ABB=ON PLU=ON L36 OR L35
L38
          414 SEA FILE=REGISTRY ABB=ON PLU=ON (L35 OR L37)
L101
               QUE ABB=ON PLU=ON BEKELE, H?/AU
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L102
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L103
L194
           110 SEA L38
L195
             1 SEA L194 AND (L101 OR L102 OR L103)
=> d que 1208
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS, SO, PA
L103
            28 SEA FILE=JAPIO ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR
L203
               (?HYDROXY?(1W)ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR
               CH3) (2A) ACRYL?))
L204
            96 SEA FILE=JAPIO ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR
               (?HYDROXY?(3W)?BUTYL?))(3A)?ACRYL?
L205
             1 SEA FILE=JAPIO ABB=ON PLU=ON L203 AND L204
             0 SEA FILE=JAPIO ABB=ON PLU=ON L205 AND (BEKELE OR DECKNER)/AU
L206
            0 SEA FILE=JAPIO ABB=ON PLU=ON L205 AND L103
L207
L208
             O SEA FILE=JAPIO ABB=ON PLU=ON (L206 OR L207)
=> d que nos 1228
               QUE ABB=ON PLU=ON BEKELE, H?/AU
L101
               OUE ABB=ON PLU=ON DECKNER, G?/AU
L102
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L103
               QUE ABB=ON PLU=ON ?PIGMENT?
L116
               QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMI
L117
               NA OR BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR
               ? OR TITANIUM OR TITANIA OR TITANAT? OR MICA
               QUE ABB=ON PLU=ON ?GLYCERETH?
L122
               QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L123
L211
            1 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L212
L215
           904 SEA FILE=MEDLINE ABB=ON PLU=ON L212
L216
             4 SEA FILE=MEDLINE ABB=ON PLU=ON L211
               QUE ABB=ON PLU=ON POLYMERS+PFT, OLD, NEW, NT/CT
L218
               QUE ABB=ON PLU=ON "POLYMETHACRYLIC ACIDS"+PFT, OLD, NEW,
L219
               NT/CT
L220
           617 SEA FILE=MEDLINE ABB=ON PLU=ON ((L215 OR L216) OR (L211 OR
               L212)) AND (L218 OR L219)
L221
           617 SEA FILE=MEDLINE ABB=ON PLU=ON L220 AND (L215 OR L216)
L222
               OUE ABB=ON PLU=ON COSMETICS+PFT,OLD,NEW,NT/CT
L223
             6 SEA FILE=MEDLINE ABB=ON PLU=ON L221 AND L222
             O SEA FILE=MEDLINE ABB=ON PLU=ON L221 AND L122
L224
            78 SEA FILE=MEDLINE ABB=ON PLU=ON L221 AND ((L116 OR L117) OR
L225
               L123)
L226
            15 SEA FILE=MEDLINE ABB=ON PLU=ON L225 AND (L116 OR L123)
L227
            21 SEA FILE=MEDLINE ABB=ON PLU=ON (L223 OR L224) OR L226
L228
             0 SEA FILE=MEDLINE ABB=ON PLU=ON L227 AND (L101 OR L102 OR
               L103)
=> d que nos 1240
               QUE ABB=ON PLU=ON BEKELE, H?/AU
L101
L102
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L103
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS, SO, PA
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(
L192
               1W) ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)A
```

```
CRYL?))
L193
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY
               ?(3W)?BUTYL?))(3A)?ACRYL?
L211
            1 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L212
L233
          993 SEA FILE=EMBASE ABB=ON PLU=ON L212
L234
            O SEA FILE=EMBASE ABB=ON PLU=ON L211
               QUE ABB=ON PLU=ON "POLYACRYLIC ACID"+PFT,OLD,NEW,NT/CT
L235
L236
            25 SEA FILE=EMBASE ABB=ON PLU=ON ((L233 OR L234) OR (L192 OR
               L193)) AND L235
             O SEA FILE=EMBASE ABB=ON PLU=ON L236 AND (L101 OR L102 OR
L240
               L103)
=> d his 1252
     (FILE 'BIOSIS, CABA, DRUGU, VETU, BIOTECHNO' ENTERED AT 09:30:43 ON 14
    MAR 2008)
             0 S L251 AND L101-L103
L252
=> d que nos 1252
L11 ( 1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L12
              SEL PLU=ON L11 1- RN: 8 TERMS
            8) SEA FILE=REGISTRY ABB=ON PLU=ON L12
L13 (
           14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
L14 (
               03)X"/MF
             1) SEA FILE=REGISTRY ABB=ON PLU=ON L13 AND L14
L15 (
L16 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
               Ν
L17 (
          177)SEA FILE=REGISTRY ABB=ON PLU=ON L16 AND PMS/CI
L18
          177 SEA FILE=REGISTRY ABB=ON PLU=ON L17 OR L15
L23 (
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON US2004-824298/APPS
L24
              SEL PLU=ON L23 1- RN: 8 TERMS
L25 (
            8) SEA FILE=REGISTRY ABB=ON PLU=ON L24
            14) SEA FILE=REGISTRY ABB=ON PLU=ON "(C7 H12 O3 . C6 H10
L26 (
              03)X"/MF
L27 (
            1) SEA FILE=REGISTRY ABB=ON PLU=ON L25 AND L26
L28 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CR
               Ν
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L28 AND PMS/CI
L29 (
L30 (
           177) SEA FILE=REGISTRY ABB=ON PLU=ON L29 OR L27
L31
               STR
L32
               STR
L33
               SCR 2043
         414)SEA FILE=REGISTRY SSS FUL (L33 AND L32 AND L31)
414)SEA FILE=REGISTRY ABB=ON PLU=ON L27 OR L30 OR L34
L34 (
L35 (
            0)SEA FILE=REGISTRY ABB=ON PLU=ON L35 AND RELATED POLYMERS/FA
L36 (
L37 (
          414) SEA FILE=REGISTRY ABB=ON PLU=ON L36 OR L35
L38
           414 SEA FILE=REGISTRY ABB=ON PLU=ON (L35 OR L37)
L101
              QUE ABB=ON PLU=ON BEKELE, H?/AU
L102
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L103
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(
L192
               1W) ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)A
               CRYL?))
L193
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY
               ?(3W)?BUTYL?))(3A)?ACRYL?
L211
            1 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
            1 SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L212
            0 SEA L38
L244
```

```
L245
            0 SEA L18
L246
          813 SEA L212
L247
            3 SEA L211
L249
          815 SEA L244 OR L245 OR L246 OR L247
L250
           346 SEA L249 AND (?POLYMER OR ?POLYMERI?)
L251
            3 SEA L250 AND (L246 OR L192) AND (L247 OR L193)
L252
             0 SEA L251 AND (L101 OR L102 OR L103)
=> d his 1260
     (FILE 'PASCAL, APOLLIT, CEABA-VTB, LIFESCI, BIOENG, BIOTECHDS, DRUGB,
     VETB, CABA, KOSMET, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 09:40:55 ON
     14 MAR 2008)
             0 S L259 AND L101-L103
L260
=> d que nos 1260
               QUE ABB=ON PLU=ON BEKELE, H?/AU
L101
               QUE ABB=ON PLU=ON DECKNER, G?/AU
L102
               QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L103
L192
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(
               1W) ETHYL))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)A
L193
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY
               ?(3W)?BUTYL?))(3A)?ACRYL?
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 2478-10-6/RN
L211
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 868-77-9/RN
L212
L255
               SEL PLU=ON L212 1- NAME: 19 TERMS
         10885 SEA L255
L256
L257
               SEL PLU=ON L211 1- NAME:
                                                6 TERMS
L258
           128 SEA L257
L259
            76 SEA (L256 OR L192) AND (L258 OR L193)
L260
             0 SEA L259 AND (L101 OR L102 OR L103)
=> dup rem 177 1157 1195 1208 1228 1240 1252 1260
L208 HAS NO ANSWERS
L228 HAS NO ANSWERS
L240 HAS NO ANSWERS
L252 HAS NO ANSWERS
L260 HAS NO ANSWERS
DUPLICATE IS NOT AVAILABLE IN 'KOSMET'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIOUE
FILE 'HCAPLUS' ENTERED AT 10:14:53 ON 14 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'WPIX' ENTERED AT 10:14:53 ON 14 MAR 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION
FILE 'USPATFULL' ENTERED AT 10:14:53 ON 14 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
PROCESSING COMPLETED FOR L77
PROCESSING COMPLETED FOR L157
PROCESSING COMPLETED FOR L195
PROCESSING COMPLETED FOR L208
PROCESSING COMPLETED FOR L228
PROCESSING COMPLETED FOR L240
PROCESSING COMPLETED FOR L252
```

PROCESSING COMPLETED FOR L260

L272 10 DUP REM L77 L157 L195 L208 L228 L240 L252 L260 (0 DUPLICATES

REMOVED)

ANSWER '1' FROM FILE HCAPLUS ANSWERS '2-9' FROM FILE WPIX ANSWER '10' FROM FILE USPATFULL

=> file stnguide

FILE 'STNGUIDE' ENTERED AT 10:15:14 ON 14 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2008 (20080307/UP).

=> d ibib ed abs hitind hitstr YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL' - CONTINUE? (Y)/N:y

L272 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:902144 HCAPLUS Full-text

DOCUMENT NUMBER: 141:370240

TITLE: Transfer-resistant cosmetic compositions containing

hydrophilic polymers and glycerols and volatile

solvent

INVENTOR(S): Bekele, Haimanot; Deckner, George

Endel

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.				KIND DATE			APPLICATION NO.				DATE						
	WO	2004	 0915	61		A1	_	2004	1028		WO 2	004-	US11	977		2	0040	414
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
			BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
			SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
			TD,	ΤG														
	US	2005	0192	98		A1		2005	0127		US 2	004-	8242	98		2	0040	414 <
	CN	1774	233			Α		2006	0517	1	CN 2	004-	8001	0166		2	0040	414
	ΕP	1691	778			A1		2006	0823		EP 2	004-	7595	90		2	0040	414
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	FΙ,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
	JΡ	2006	5236	18		Τ		2006	1019	1	JP 2	006-	5012	81		2	0040	414
PRIO:	RIT	Y APP	LN.	INFO	.:						US 2	003-	4628	64P]	P 2	0030	414
										,	WO 2	004-	US11	977	Ţ	W 2	0040	414
			~	_														

- ED Entered STN: 28 Oct 2004
- AB The cosmetic compns. of the present invention provide a durable film after application that resists degradation over time. Cosmetic compns. of the present invention comprise: polymers selected from the group consisting of hydrophilic copolymers and terpolymers; and Glycerols selected from the group consisting of glycerol, modified glycerols, and mixts. thereof; and a polar volatile solvent. For example, a lip color contained copolymer of 4-Hydroxybutyl acrylate and 2-hydroxyethyl methacrylate 10.0, silk mica 2.64, propylparaben 0.2, Salcare SC95 0.99, ethosperse 8.0, ethanol 21.84% and related coloring material and water.
- IC ICM A61K007-025
 - ICS A61K007-027
- CC 62-4 (Essential Oils and Cosmetics)
 Section cross-reference(s): 35
- IT 56-81-5, Glycerol, biological studies 56-81-5D, Glycerol, derivs.

64-17-5, Ethanol, biological studies 94-13-3, Propyl paraben 25322-68-3D, PEG, alkyl derivs. 26161-33-1, Salcare SC-95 39990-17-5, 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents)

IT 39990-17-5, 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents)

RN 39990-17-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 4-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d iall abeq tech abex 2-9
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL' - CONTINUE? (Y)/N:y

L272 ANSWER 2 OF 10 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2006-585139 [60] WPIX CROSS REFERENCE: 2006-585099; 2008-C32595

DOC. NO. CPI: C2006-181178 [60]

TITLE: Method for making temporary wet strength additive, useful

for e.g. facial tissue, comprises oxidizing

homo-crosslinking monomer unit present in a polymer, which comprising the homo-crosslinking monomeric unit and a cationic monomer unit

DERWENT CLASS: A14; A81; A83; D22; F09

INVENTOR: BARCUS R L; MOHAMMADI K P; BARCUS R; MOHAMMADI K PATENT ASSIGNEE: (PROC-C) PROCTER & GAMBLE CO; (BARC-I) BARCUS R

L; (MOHA-I) MOHAMMADI K P

COUNTRY COUNT: 112

PATENT INFORMATION:

PAT	ENT NO	KINI	D DATE	WEEK	LA	PG	MAIN	IPC
US	20060183867	A1	20060817	(200660)*	EN	11[0]		
WO	2006089182	A1	20060824	(200660)	ΕN			
US	7259218	В2	20070821	(200755)	EN			
ΕP	1848858	A1	20071031	(200771)	EN			
ΑU	2006214075	A1	20060824	(200801)	ΕN			

APPLICATION DETAILS:

E	PATENT NO	KIND	API	PLICATION	DATE
Ţ	JS 20060183867	A1	US	2005-59950 2	20050217
E	P 1848858 A1		ΕP	2006-735430	20060216
V	70 2006089182	A1	WO	2006-US5768	20060216
E	CP 1848858 A1		WO	2006-US5768	20060216
P	U 2006214075	A1	ΑU	2006-214075	20060216

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
EP 1848858	A1	Based on	WO 2006089182	Α
AU 2006214075	A1	Based on	WO 2006089182	Α

PRIORITY APPLN. INFO: US 2005-59950 20050217

INT. PATENT CLASSIF.:

D21H0021-20 [N,A]

ECLA: D21H0021-20

ICO: N21H0017:37; N21H0027:00D

USCLASS NCLM: 525/329.400

NCLS: 525/328.200; 525/329.400; 525/329.700; 525/330.300; 525/383.000; 526/303.100; 526/310.000; 526/319.000

BASIC ABSTRACT:

US 20060183867 A1 UPAB: 20060919

NOVELTY - Method for making a temporary wet strength additive (I) comprises oxidizing a homo-cross linking monomeric unit present in a polymer comprising the homo-cross linking monomeric unit and a cationic monomeric unit to give (I).

DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is included for (I) produced by the above method.

USE - (I) is useful for nonwoven tissue paper products containing cellulosic fibers such as toilet paper, facial tissue and paper towels.

 $\tt ADVANTAGE\ -\ (I)$ provides wet tensile strength properties and wet tensile decay properties to the fibrous structures and sanitary tissue products.

MANUAL CODE: CPI: A03-A05A; A10-E11; A12-M01; A12-W06B; D08-B;

F05-A06C

TECH

POLYMERS - Preferred Method: The method further comprises providing a

non-nucleophilic monomer such that the non-nucleophilic monomer is polymerized along with the homo-cross linking monomers and the cationic monomer. Preferred Components: The homocrosslinking monomeric unit is derived from a monomer having an alkene compound of formula (CH2=(C)(Y3)(Z)). The cationic monomeric unit is derived from any polymerizable monomer, which imparts a positive charge to (I). The polymer further comprises a non-nucleophilic monomeric unit having an alkene compound of formula (CH2=(C)(Y2)(W1)). (I) is a carbonyl compound of formula (CH3-(-CH2-C(A)(Y1))a-(-CH2-C(W1)(Y2))b-(-CH2-C(Z)(Y3))c-(-CH2-Q)d) (where the mol.% of a is 1-47% (preferably 2-30%), the mol.% of b is 0-70% (preferably 0-60%), the mol.% of c is 10-90% (preferably 30-80%), and the mol.% of d is 1-40% (preferably 2-20%)). (I) has a weight average molecular weight of about 70000-400000 (preferably at least 70000). Y1-Y3=H, CH3 or halo;

Z = nucleophilic moiety capable of forming an unstable covalent bond with an electrophilic moiety or (-C(=0)-X-(R2)-OH) (preferably 2-hydroxyethyl acrylate);

R1, R2 = optionally substituted aliphatic group (preferably 2-7C aliphatic chain or 2-4C aliphatic chain);

X = O, NH, or NCH3 (preferably O);

A = aldehyde compound of formula (CH3-(C=O)-X-(R1)-CH(=O)) (preferably derived from the oxidation of 2-hydroxyethyl acrylate monomeric units); Q = cationic monomeric unit; and

W1 = a non-nucleophilic moiety or a nucleophilic moiety that does not form a stable covalent bond with an electrophilic moiety (preferably N,N-dialkyl acrylamide).

ABEX EXAMPLE - 2-Hydroxyethylacrylate (279.9 g), N,N-dimethyl acrylamide (54.75 g), (3-(methacryloylamino) propyl)trimethyl ammonium chloride (60.96 g), 2,2'-azobis(2-amidinopropane)dihydrochloride (2.22 g), 2-propanol (190 ml) and water (2.19 l) were added. The solution was sparged with nitrogen for 25 minutes, heated at 58degreesC and stirred under nitrogen. The solution was heated at 58degreesC for an additional 20 hours and cooled. The solution was adjusted to pH 9.5 with sodium hydroxide. 4-Acetamido tetramethyl-piperidine-1-oxyl (60 mg) was dissolved in water (10 ml) and added to the solution. Sodium bicarbonate (3.33 g) was added to sodiumhypochlorite solution (195 ml), stirred and added drop wise to polymer solution over 30 minutes. The mixture was stirred for 30 minutes and the pH was adjusted to 4.5 with hydrochloric acid to give temporary wet strength additive.

L272 ANSWER 3 OF 10 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2005-343278 [35] WPIX CROSS REFERENCE: 2005-343277; 2005-343279

DOC. NO. CPI: C2005-106217 [35]

TITLE: Temporary wet strength additive for fibrous structure used in sanitary tissue products, e.g. napkins, includes

polymer backbone comprising co-crosslinking monomeric unit, homo-crosslinking monomeric unit, and cationic

monomeric unit

DERWENT CLASS: A14; A17; A25; A97; D22; F09

INVENTOR: BARCUS R L; KELLY S R; LEIMBACH A M; MOHAMMADI K P PATENT ASSIGNEE: (BARC-I) BARCUS R L; (KELL-I) KELLY S R; (LEIM-I)

LEIMBACH A M; (MOHA-I) MOHAMMADI K P; (PROC-C)

PROCTER & GAMBLE CO

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC

US 20050082024 A1 20050421 (200535)* EN 13[0] US 7258763 B2 20070821 (200755) EN

APPLICATION DETAILS:

PATENT NO	KIND	API	PLICATION	DATE
US 20050082024	A1 CIP of	US	2003-687381	20031016
US 20050082024	A1	US	2004-958016	20041004
US 7258763 B2 (CIP of	US	2003-687381	20031016
US 7258763 B2		US	2004-958016	20041004

FILING DETAILS:

PATENT NO	KIND	PATENT NO	
US 7258763	B2 CIP of	US 7125469	В
PRIORITY APPLN. INFO:	US 2004-958016 US 2003-687381	20041004 20031016	
INT. PATENT CLASSIF.:			
IPC ORIGINAL:	C08F0016-00 [I,C];	C08F0016-02 [I,A];	C08F0018-00 [I,C];
	C08F0018-10 [I,A];	D21H0017-00 [I,C];	D21H0017-33 [I,A];
	D21H0021-14 [I,C];	D21H0021-20 [I,A]	
IPC RECLASSIF.:	C08F0246-00 [I,A];	C08F0246-00 [I,C];	D21H0017-00 [I,C];
	D21H0017-33 [I,A];	D21H0021-14 [I,C];	D21H0021-20 [I,A];
	D21H0021-22 [I,A];	D21H0021-22 [I,C]	
ECLA:	D21H0017-33; D21H00)21-20; D21H0021-22	
USCLASS NCLM:	162/123.000		
NCLS:	162/158.000; 162/16	54.100; 162/168.100;	; 526/304.000;
	526/307.500; 526/32	28.500	

BASIC ABSTRACT:

US 20050082024 A1 UPAB: 20051222

NOVELTY - A temporary wet strength additive comprises a polymer backbone including a co-crosslinking monomeric unit, a homo-crosslinking monomeric unit, and a cationic monomeric unit.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (A) a single- or multi-ply sanitary tissue product comprising a fibrous structure containing the inventive temporary wet strength;
 - (B) a surgical garment comprising the fibrous structure;
- (C) a process for making a fibrous structure comprising depositing a fiber furnish on a foraminous forming surface to form an embryonic fibrous web, drying the web to form a fibrous structure, and applying the inventive temporary wet strength additive;
- (D) a process for making a sanitary tissue product comprising converting the fibrous structure into a sanitary tissue product; and
- (E) a method of making the temporary wet strength additive comprising polymerizing the monomeric units.

 ${\tt USE}$ - For fibrous structure used in sanitary tissue products (claimed), e.g. napkins, paper towels, household tissues (facial and/or toilet tissue), or disposable hospital wear.

ADVANTAGE - The invention provides fibrous structures and sanitary tissue products exhibiting high initial wet tensile strength and improved flushability and/or reduced-clogging properties. The products maintain a greater percentage of dry strength when they are wetted while showing (on exposure to water and/or other aqueous solutions) a substantial decay, preferably rapidly and effectively, of their initial wet strength, thus mitigating clogging of sewage systems and/or septic tanks. MANUAL CODE:

CPI: A04-D01; A04-D04; A04-F06E2; A12-G00G; A12-S05X;

A12-V03A; D09-C03; F03-C; F04-C01; F04-C06

TECH

TITLE:

```
ORGANIC CHEMISTRY - Preferred Component: The temporary wet strength
     additive is of structure (1).
     A=-C(=0)-X-(R1)-C(=0)H or -C(=0)H (N-(2,2-dimethoxyethyl)-N-methyl
     acrylamide, acrolein, methacrolein, 3,3-dimethyoxypropyl acrylamide, 3,3
     diethoxypropyl acrylamide, 3,3-dimethoxypropyl methacrylamide, 2,2
     dimethoxy-1-methylethyl acrylate, 3,3-dimethoxypropyl methacrylate,
     2-(acryloylamino)ethanal dimethylacetal, 2-(methacryloylamino)propanal
     dimethyl acetal, 5-(acryloylamino)pentanal dimethylacetal,
     8-(acryloyl-amino)octanal dimethylacetal, or 3-(N-acryloyl-N-
     methylamino) propanal dimethyl acetal);
     Z=-C(=0)-X-(R2)-OH or -OH (2-hydroxyethyl acrylate (preferably),
     poly(ethylene glycol) acrylate, 2-hydroxyethyl methacrylate,
     4-hydroxybutyl acrylate, glyceryl mono-methacrylate, glyceryl
     mono-acrylate, 2-hydroxypropyl acrylate 2-hydroxypropyl methacrylate,
     hydroxypropyl acrylate 4-hydroxybutyl methacrylate, diethylene glycol
     mono-methacrylate, sorbitol methacrylate, methyl 2-hydroxymethyl acrylate,
     3-methyl butanol-2 methacrylate, 3,3dimethyl butanol-2 methacrylate, ethyl
     2-(hydroxymethy1) acrylate, N-2-hydroxyethyl methacrylamide,
     N-(2hydroxypropyl) methacrylamide, 2-acrylamidoglycolic acid, or
     acrylamidotrishydroxymethylmethane);
     X=-0-, -NH-, or -NCH3-;
     R1=optionally substituted aliphatic groups (2-7C aliphatic chain);
     R2=optionally substituted aliphatic groups (2-4C aliphatic chain);
     Y1-Y3=-H, -CH3, or halo;
     Q=cationic monomeric unit;
     W=non-nucleophilic moiety or a nucleophilic moiety that does not form a
     stable covalent bond with the electrophilic moiety (vinyl pyrrolidones
     (preferably), vinyl oxazolidones, vinyl imidazoles, vinyl imidazolines,
     N, N-dialkyl acrylamides, alkyl acrylates, alkyl methacrylates, methoxy
     poly(ethylene glycol), methacrylates, or carboxylic acids);
     a=1-47 (5-30) mol.%;
     b=0-70 (0-60) \text{ mol.};
     c=10-90 (30-80) mol.%;
     d=1-40 (2-20) mol.%.
     Preferred Property: The temporary wet strength additive has a weight
     average molecular weight of at least 70000 (70000-400000). It exhibits a
     glass transition temperature of less than 100degreesC.
     Preferred Composition: The fibrous structure comprises 0.005-5 wt.% of the
     fibrous structure of the temporary wet strength additive.
ABEX EXAMPLE - N-(2,2-dimethoxyethyl)-N-methyl acrylamide (1.006 g),
     2-hydroxyethyl acrylate (5.645 g), (3-(methacryloylamino)propyl)trimethyl
     ammonium chloride (0.763 q), 2,2'-azobis(2-amidinopropane)dihydrochloride
     (0.0475 \text{ g}), 2-propanol (5 \text{ ml}), and water (45 \text{ ml}) were added to a flask.
     This solution was sparged with argon for 25 minutes. The flask was heated
     for 20 hours at 60degreesC in an oil bath. A small analytical sample was
     reserved and then water (75 ml) and 1N hydrochloric acid (14 ml) were
     added. The solution was heated at 40degreesC for 4 hours under argon.
     After cooling to room temperature, the solution was adjusted to pH 5 with
     1 N sodium hydroxide and dialyzed against water for 16 hours. The weight
     average molecular weight of the polymer was 140000 and a, c, and d were
     9-11%, 83-85%, and 5-7%, respectively. The glass transition temperature of
     the polymer was 77degreesC.
L272 ANSWER 4 OF 10 WPIX COPYRIGHT 2008
                                               THE THOMSON CORP on STN
ACCESSION NUMBER:
                   2005-343277 [35]
                                       WPIX
                     2005-343278; 2005-343279
CROSS REFERENCE:
DOC. NO. CPI:
                     C2005-106216 [35]
```

Temporary wet strength additive for fibrous structure

used in sanitary tissue products, e.g. napkins, includes

polymer backbone comprising co-crosslinking monomeric unit, homo-crosslinking monomeric unit, and cationic

monomeric unit

DERWENT CLASS: A14; A97; D22; F09; P28

INVENTOR: BARCUS R L; KELLY S R; LEIMBACH A M; MOHAMMADI K P;

BARCUS R; KELLY S; LEIMBACH A; MOHAMMADI K

PATENT ASSIGNEE: (PROC-C) PROCTER & GAMBLE CO

COUNTRY COUNT: 107

PATENT INFORMATION:

PAT	TENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
US	20050082023	A1	20050421	(200535)*	EN	13[0]	
WO	2005038131	A2	20050428	(200535)	EN		
WO	2005038132	A2	20050428	(200535)	ΕN		
EP	1676004	A2	20060705	(200644)	EN		
EP	1680546	A2	20060719	(200647)	ΕN		
US	7125469	В2	20061024	(200670)	ΕN		
MX	2006004129	A1	20060701	(200677)	ES		
AU	2004282543	A1	20050428	(200681)	ΕN		
AU	2004282544	A1	20050428	(200681)	ΕN		
CN	1867733	Α	20061122	(200720)	ZH		
CN	1867734	A	20061122	(200720)	ZH		
JP	2007508468	M	20070405	(200726)	JA	26	
JP	2007513260	W	20070524	(200735)	JA	27	
MX	2006004128	A1	20061101	(200737)	ES		
AU	2004282543	В2	20070705	(200782)	EN		

APPLICATION DETAILS:

PATENT NO KIND	API	PLICATION	DATE
US 20050082023 A1	US	2003-687381	20031016
AU 2004282543 A1	AU	2004-282543	20041013
AU 2004282544 A1	AU	2004-282544	20041013
CN 1867733 A	CN	2004-8002993	11 20041013
CN 1867734 A	CN	2004-8002992	27 20041013
EP 1676004 A2	EP	2004-809941	20041013
EP 1680546 A2	EP	2004-809942	20041013
WO 2005038131 A2	WO	2004-US33653	3 20041013
WO 2005038132 A2	WO	2004-US33654	1 20041013
EP 1676004 A2	WO	2004-US33653	3 20041013
EP 1680546 A2	WO	2004-US33654	1 20041013
MX 2006004129 A1	WO	2004-US33654	1 20041013
JP 2007508468 W	WO	2004-US33653	3 20041013
JP 2007513260 W	WO	2004-US33654	1 20041013
MX 2006004128 A1	WO	2004-US33653	3 20041013
JP 2007508468 W	JP	2006-534465	20041013
JP 2007513260 W	JP	2006-535593	20041013
MX 2006004128 A1	MX	2006-4128 20	0060411
MX 2006004129 A1	MX	2006-4129 20	0060411
AU 2004282543 B2	AU	2004-282543	20041013

FILING DETAILS:

Ε	PA'	TENT NO	KIND			PA:	TENT NO	
-								
Е	ΞP	1676004	A2	Based	on	WO	2005038131	Α
Z	U/	2004282543	A1	Based	on	WO	2005038131	Α

```
JP 2007508468
                     W
                           Based on
                                           WO 2005038131
     MX 2006004128 A1
                           Based on
                                          WO 2005038131
     EP 1680546
                     A2
                           Based on
                                          WO 2005038132
     MX 2006004129
                     A1
                           Based on
                                          WO 2005038132
                                          WO 2005038132
     AU 2004282544
                     A1
                           Based on
      JP 2007513260
                     W
                           Based on
                                          WO 2005038132
     AU 2004282543
                     В2
                           Based on
                                          WO 2005038131
PRIORITY APPLN. INFO: US 2003-687381
                                          20031016
INT. PATENT CLASSIF.:
          MAIN:
                     D21H
                     A47K0010-00 [I,C]; A47K0010-00 [N,C]; A47K0010-16 [I,A];
   IPC ORIGINAL:
                     A47K0010-16 [N,A]; A47K0007-00 [N,A]; A47K0007-00 [N,C];
                     C08F0220-00 [I,C]; C08F0220-28 [I,A]; C08F0220-52 [I,A];
                     C08F0246-00 [I,A]; D21H0017-00 [I,C]; D21H0017-33 [I,A];
                     D21H0017-33 [I,A]; D21H0021-14 [I,C]; D21H0021-14 [I,C];
                     D21H0021-20 [I,A]; D21H0021-22 [I,A]; D21H0027-00 [I,A];
                     D21H0027-00 [I,A]; D21H0027-00 [I,C]; D21H0027-00 [I,C];
                     C08F0246-00 [I,C]; D21H0017-00 [I,C]; D21H0021-14 [I,C];
                     D21H0021-20 [I,A]; D21H0021-22 [I,C]
                     C08F0246-00 [I,A]; C08F0246-00 [I,C]; D21H0017-00 [I,C];
 IPC RECLASSIF.:
                     D21H0017-33 [I,A]; D21H0021-14 [I,C]; D21H0021-20 [I,A];
                     D21H0021-22 [I,A]; D21H0021-22 [I,C]
ECLA:
                     D21H0017-33; D21H0021-20; D21H0021-22
BASIC ABSTRACT:
```

US 20050082023 A1 UPAB: 20051222

NOVELTY - A temporary wet strength additive comprises a polymer backbone including a co-crosslinking monomeric unit, a homo-crosslinking monomeric unit, and a cationic monomeric unit.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (A) a single- or multi-ply sanitary tissue product comprising a fibrous structure containing the inventive temporary wet strength;
 - (B) a surgical garment comprising the fibrous structure;
- (C) a process for making a fibrous structure comprising depositing a fiber furnish on a foraminous forming surface to form an embryonic fibrous web, drying the web to form a fibrous structure, and applying the inventive temporary wet strength additive;
- (D) a process for making a sanitary tissue product comprising converting the fibrous structure into a sanitary tissue product; and
- $\mbox{(E)}$ a method of making the temporary wet strength additive comprising polymerizing the monomeric units.

The fibrous structure exhibits a Total Wet Tensile Loss (Decay) after 5 minutes of soaking in neutral pH water of at least 35% and/or a Total Wet Tensile Loss (Decay) after 30 minutes of soaking in neutral pH water of at least 65% and/or an initial wet tensile strength/dry tensile strength ratio (WTi/DT) of at least 7.

USE - The invention is used for fibrous structure used in sanitary tissue products (claimed), e.g. napkins, paper towels, household tissues (facial, paper, and/or toilet tissue), or disposable hospital wear. The fibrous structure can be in the form of surgical garments including surgical shoe covers, and/or non-woven paper products, e.g. surgical towels and wipes.

ADVANTAGE - The invention provides fibrous structures and sanitary tissue products exhibiting high initial wet tensile strength and improved flushability. The products maintain a greater percentage of dry strength when they are wetted while showing (on exposure to water and/or other aqueous solutions) a substantial decay, preferably rapidly and effectively, of their initial wet strength, thus mitigating clogging of sewage systems and/or septic tanks. MANUAL CODE: CPI: A11-B05D; A11-C02C; A12-W06; D09-C02B; D09-C04D;

F05-A06A2; F05-A06B

TECH

```
ORGANIC CHEMISTRY - Preferred Component: The temporary wet strength
     additive is of structure (1).
     A=-C(=0)-X-(R1)-C(=0)H or -C(=0)H (N-(2,2-dimethoxyethyl)-N-methyl
     acrylamide, acrolein, methacrolein, 3,3-dimethyoxypropyl acrylamide, 3,3
     diethoxypropyl acrylamide, 3,3-dimethoxypropyl methacrylamide, 2,2
     dimethoxy-1-methylethyl acrylate, 3,3-dimethoxypropyl methacrylate,
     2-(acryloylamino)ethanal dimethylacetal, 2-(methacryloylamino)propanal
     dimethyl acetal, 5-(acryloylamino)pentanal dimethylacetal,
     8-(acryloyl-amino)octanal dimethylacetal, or 3-(N-acryloyl-N-
     methylamino) propanal dimethyl acetal);
     Z=-C(=0)-X-(R2)-OH or -OH (2-hydroxyethyl acrylate (preferably),
     poly(ethylene glycol) acrylate, 2-hydroxyethyl methacrylate,
     4-hydroxybutyl acrylate, glyceryl mono-methacrylate, glyceryl
     mono-acrylate, 2-hydroxypropyl acrylate 2-hydroxypropyl methacrylate,
     hydroxypropyl acrylate 4-hydroxybutyl methacrylate, diethylene glycol
     mono-methacrylate, sorbitol methacrylate, methyl 2-hydroxymethyl acrylate,
     3-methyl butanol-2 methacrylate, 3,3dimethyl butanol-2 methacrylate, ethyl
     2-(hydroxymethy1) acrylate, N-2-hydroxyethyl methacrylamide,
     N-(2hydroxypropyl) methacrylamide, 2-acrylamidoglycolic acid, or
     acrylamidotrishydroxymethylmethane);
     X=-O-, -NH-, or -NCH3-;
     R1=optionally substituted aliphatic groups (2-7C aliphatic chain);
     R2=optionally substituted aliphatic groups (2-4C aliphatic chain);
     Y1-Y3=-H, -CH3, or halo;
     Q=cationic monomeric unit;
     W=non-nucleophilic, water-soluble nitrogen heterocyclic moiety or tertiary
     amide (vinyl pyrrolidones (preferably), vinyl oxazolidones, vinyl
     imidazoles, vinyl imidazolines, N,N-dialkyl acrylamides, alkyl acrylates,
     alkyl methacrylates, or N, N'-dialkyl acrylamides), methacrylates, or
     carboxvlic acids);
     a=1-47 (5-30) mol.%;
     b=0-70 (0-60) \text{ mol.};
     c=10-90 (30-80) mol.%;
     d=1-40 (2-20) mol.%.
     Preferred Property: The temporary wet strength additive has a weight
     average molecular weight of at least 20000 (20000-400000). It exhibits a
     glass transition temperature of less than 100degreesC.
    Preferred Composition: The fibrous structure comprises 0.005-5 wt.% of the
     fibrous structure of the temporary wet strength additive.
ABEX EXAMPLE - N-(2,2-dimethoxyethyl)-N-methyl acrylamide (1.006 g),
     2-hydroxyethyl acrylate (5.645 g), (3-(methacryloylamino)propyl)trimethyl
     ammonium chloride (0.763 g), 2,2'-azobis(2-amidinopropane)dihydrochloride
     (0.0475 \text{ g}), 2-propanol (5 \text{ ml}), and water (45 \text{ ml}) were added to a flask.
     This solution was sparged with argon for 25 minutes. The flask was heated
     for 20 hours at 60degreesC in an oil bath. A small analytical sample was
     reserved and then water (75 ml) and 1N hydrochloric acid (14 ml) were
     added. The solution was heated at 40degreesC for 4 hours under argon.
     After cooling to room temperature, the solution was adjusted to pH 5 with
     1 N sodium hydroxide and dialyzed against water for 16 hours. The weight
     average molecular weight of the polymer was 140000 and a, c, and d were
     9-11%, 83-85%, and 5-7%, respectively.
L272 ANSWER 5 OF 10 WPIX COPYRIGHT 2008
                                               THE THOMSON CORP on STN
ACCESSION NUMBER:
                     2002-195545 [25] WPIX
DOC. NO. CPI:
                     C2002-060353 [25]
TITLE:
                     Laundry detergent composition, used as heavy duty
                      detergent, comprises vinyl polymer derived from
                      carboxylic acids, hydrophilic ethylenically unsat.
                      monomer containing poly(oxyethylene), hydrophobic
                      ethylenically unsat. monomer
```

DERWENT CLASS: A14; A25; A97; D25

INVENTOR: GOSSELINK E P; MORELLI J P; ROHRBAUGH R H

PATENT ASSIGNEE: (PROC-C) PROCTER & GAMBLE CO

COUNTRY COUNT: 93

PATENT INFORMATION:

Ε	PATENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
				(200225)*		39[0]	
_	AU 2001074974 JS 20020022585			(200225) (200225)			

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
WO 2001092451 A1	WO 2001-US17078 20010529
US 20020022585 A1 Provisional	US 2000-207936P 20000530
US 20020022585 A1	US 2001-866104 20010525
AU 2001074974 A	AU 2001-74974 20010529

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001074974 A	Based on	WO 2001092451 A

PRIORITY APPLN. INFO: US 2000-207936P 20000530 US 2001-866104 20010525

INT. PATENT CLASSIF.:

IPC RECLASSIF.: C11D0011-00 [I,A]; C11D0011-00 [I,C]; C11D0003-37 [I,A]; C11D0003-37 [I,C]; C11D0003-40 [I,C]; C11D0003-42 [I,A]

ECLA: C11D0003-37C6; C11D0003-42; C11D0011-00B2A

BASIC ABSTRACT:

WO 2001092451 A1 UPAB: 20060119

NOVELTY - A laundry detergent composition comprises vinyl addition polymer derived from (i) monoethylenically unsaturated 3-8C monocarboxylic acids, 4-8C dicarboxylic acids, and/or their salts; (ii) hydrophilic ethylenically unsaturated monomers containing poly(oxyethylene); and (iii) hydrophobic ethylenically unsaturated monomers having a water solubility of less than 1%.

DETAILED DESCRIPTION - A laundry detergent composition comprises a vinyl addition polymer and a cleaning adjunct material(s) (preferably an optical brightener). The vinyl addition polymer is derived from (i) monoethylenically unsaturated 3-8C monocarboxylic acids, 4-8C dicarboxylic acids and/or their salts, (ii) hydrophilic ethylenically unsaturated monomers containing poly(oxyethylene) and (iii) hydrophobic ethylenically unsaturated monomers having a water solubility of less than 1%.

USE - As heavy duty detergent composition, fabric care composition (excluding fabric conditioner), or dry-added composition.

ADVANTAGE - The inventive laundry detergent composition provides improved cleaning and whitening benefits on fabrics. It exhibits relatively dilute efficacy and does not require a resin to attach the vinyl addition polymer to a substrate. MANUAL CODE: CPI: A04-F04; A04-F05; A05-H03; A10-E01; A12-W12A;

D11-A01; D11-A02; D11-A03A; D11-A04; D11-A11; D11-A12

TECH

POLYMERS - Preferred Components: Preferably, (ii) are (meth)acrylate esters, N-substituted (meth)acrylamides, vinyl ether, allyl ethers, vinyl carbonates and/or vinyl carbamates. The weight fraction of the sum of all

```
oxyethylene is greater than 0.55 of the monomer formula weight.
     Preferably, (i) are acrylic acid, methacrylic acid and/or maleic acid.
     Preferably, (iii) are butyl(meth)acrylate, hexyl(meth)acrylate,
     2-ethylhexyl(meth)acrylate, lauryl(meth)acrylate, N-butyl(meth)acrylamide,
     N-hexyl(meth)acrylamide, N-lauryl(meth)acrylamide, vinyl laurate,
     diisobutylene or styrene.
     Preferred Vinyl Polymer: The vinyl addition polymer further comprises
     hydroxyethyl(meth)acrylate, (meth)acrylamide, N-(2-hydroxypropyl)
     (meth) acrylamide, 4-styrenesulfonic acid, 2-acrylamido-2-methyl-1-
     propanesulfonic acid, 2-propene-1-sulfonic acid, 3-sulfopropyl
     methacrylate, N-vinyl pyrollidone, N-vinyl caprolactam, N-vinyl
     oxazolidinone or vinyl acetate. The vinyl addition polymer is preferably
     of formula (I).
     Preferred Polymer Preparation: The vinyl addition polymer is prepared by
     either an emulsion polymerization process or a solution polymerization
     Preferred Properties: The vinyl addition polymer has a Polymer
     Viscosifying Factor of less than 1.5, and a number average molecular
     weight of 1000-100000. The laundry detergent composition is sufficiently
     alkaline such that upon dilution to 1% with water it has a pH of greater
     than 7 at 25 degreesC. The composition may be in the form of powder, foam,
     bar, tablet, solution, paste or slurry.
     Preferred Composition: The laundry detergent composition comprises (a)
     anionic, nonionic, cationic, ampholytic, and/or zwitterionic surfactant
     (10-75 \text{ wt.}^3); (b) fluorescent whitening agent(s) (0.01-1 \text{ wt.}^3); and (c)
     water soluble vinyl addition polymer (0.01-1 wt.%).
     -(-A-)m-(-B-)n-(-C-)o-(-D-)p- (I)
     A = acrylic acid, methacrylic acid, maleic acid, and/or their salts;
     B = hydrophilic ethylenically unsaturated monomer of formulae R-X-G and
     R-G;
     R = CH2=C(R1)-;
     R1 = H \text{ or } 1-4C \text{ alkyl};
     X = -CH2-, -C(=0)-, or -OCO-;
     G = -O-(E)q-R2 \text{ or } -N(R1)-(E)q-R2;
     E = poly(ethylene glycol), poly(propylene glycol), and/or poly(butylene
     glycol);
     R2 = H, 1-20C alkyl, or 7-20C alkylaryl (preferably H or Me)
     q = greater than 55;
     C = hydrophobic ethylenically unsaturated monomer of formulae R-Y-L and
     Y = -CH2-, -CO2-, -OCO-, or CON(R1)-;
     L = 2-20C alkyl, 6-12C aryl, or 7-20C alkylaryl;
     Z = 6-12C aryl or 7-12C aryalkyl;
     D = carboxylic acid free ethylenically unsaturated monomer(s) different
     from R-X-G, R-G, R-Y-L, and R-Z;
     m = 1-60 \text{ wt.};
     n = 5-85 \text{ wt.}%;
     o = 10-85 \text{ wt.}\%; and
     p = 0-30 \text{ wt.}%.
ABEX EXAMPLE - A granular detergent composition was prepared comprising (wt.%)
     12C linear alkyl benzene sulfonate (9.31), 14-15C alkyl ether (0.35 EO)
     sulfate (12.74), zeolite builder (27.79), sodium carbonate (27.31),
     polyethylene glycol (PG 4000) (1.6), dispersant (2.26), 12-13C alcohol
     ethoxylate (9 EO) (1.5), sodium perborate (1.03), soil release polymer
     (0.41), enzymes (0.59), vinyl addition polymer (3), and perfume,
     brightener, suds suppressor, other minors, moisture and sulfate (balance).
L272 ANSWER 6 OF 10 WPIX COPYRIGHT 2008
                                                THE THOMSON CORP on STN
ACCESSION NUMBER:
                     2000-303147 [26]
                                         WPIX
```

C2000-091863 [26]

DOC. NO. CPI:

DOC. NO. NON-CPI: N2000-226545 [26]

TITLE: Durably wettable, liquid pervious web useful as a topsheet material for absorbent articles comprises an

apertured web and a continuous hydrophilic coating

DERWENT CLASS: A18; A23; A35; A96; D22; F07; P32; P42

FRANCE P A; LEE Y; RADOMYSELSKIY A; LEE Y P INVENTOR:

PATENT ASSIGNEE: (PROC-C) PROCTER & GAMBLE CO

COUNTRY COUNT:

PATENT INFORMATION:

PAT	TENT NO	KINI	DATE	WEEK	LA	PG	MAIN	IPC
WO	2000016914	 A1	20000330	(200026)*	EN	 29[0]		
AU	9960512	А	20000410	(200035)	ΕN			
ΕP	1115506	A1	20010718	(200142)	ΕN			
JΡ	2002526567	W	20020820	(200258)	JA	38		
MX	2001002957	A1	20011101	(200279)	ES			
ΕP	1115506	В1	20031105	(200377)	EN			
DE	69912626	E	20031211	(200405)	DE			
ES	2209554	Т3	20040616	(200442)	ES			
MX	231359	В	20051012	(200620)	ES			

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
WO 2000016914 A1	WO 1999-US21710 19990920
AU 9960512 A	AU 1999-60512 19990920
DE 69912626 E	DE 1999-612626 19990920
EP 1115506 A1	EP 1999-969356 19990920
EP 1115506 B1	EP 1999-969356 19990920
DE 69912626 E	EP 1999-969356 19990920
ES 2209554 T3	EP 1999-969356 19990920
EP 1115506 A1	WO 1999-US21710 19990920
JP 2002526567 W	WO 1999-US21710 19990920
EP 1115506 B1	WO 1999-US21710 19990920
DE 69912626 E	WO 1999-US21710 19990920
JP 2002526567 W	JP 2000-573867 19990920
MX 2001002957 A1	MX 2001-2957 20010320
MX 231359 B	WO 1999-US21710 19990920
MX 231359 B	MX 2001-2957 20010320

FILING DETAILS:

PA]	TENT NO	KIND			PA]	TENT NO	
DE	69912626	E	Based	on	EP	1115506	 А
ES	2209554	Т3	Based	on	ΕP	1115506	Α
AU	9960512	A	Based	on	WO	2000016914	Α
ΕP	1115506	A1	Based	on	WO	2000016914	Α
JΡ	2002526567	W	Based	on	WO	2000016914	Α
ΕP	1115506	B1	Based	on	WO	2000016914	Α
DE	69912626	E	Based	on	WO	2000016914	Α
MX	231359	В	Based	on	WO	2000016914	Α

PRIORITY APPLN. INFO: US 1999-382067 19990824 US 1998-157840 19980921

INT. PATENT CLASSIF.:

B05D007-24; C08J007-16 MAIN:

```
IPC RECLASSIF.: A61F0013-15 [I,A]; A61F0013-15 [I,C]; A61F0013-49 [I,A];
A61F0013-511 [I,A]; B05D0007-24 [I,A]; B05D0007-24 [I,C];
C08J0007-00 [I,A]; C08J0007-00 [I,C]; C08J0007-16 [I,A];
D04H0001-42 [I,A]; D04H0001-42 [I,C]; D06M0010-00 [I,C];
D06M0010-02 [I,A]; D06M0010-08 [I,A]; D06M0014-00 [I,C];
D06M0014-18 [I,A]
ECLA: B05D0007-24E; D06M0010-02B; D06M0010-08
```

WO 2000016914 A1 UPAB: 20060323

NOVELTY - Durably wettable, liquid pervious web comprises an apertured web and a continuous hydrophilic coating which is applied to the web by a remote plasma polymerization process.

DETAILED DESCRIPTION - A remote plasma process for making a durably wettable, liquid pervious web comprises(i) introducing a web outside a plasma reaction zone in a plasma reaction chamber (ii) coating at least one of the surfaces of the web with polymerized monomers to make the webs durably wet where the coating is less than 2.5 microns thick and is derived from a monomer gas stream which is introduced outside the zone. The stream provides a hydrophilic coating upon plasma polymerization. The web consists of polymeric films, apertured polymeric films, nonwovens and apertured nonwovens.

An INDEPENDENT CLAIM is also included for an absorbent article which comprises a durably wettable, liquid pervious topsheet.

USE - As a topsheet for absorbent articles such as baby and adult diapers and feminine hygiene products.

ADVANTAGE - The web is durably wettable, liquid pervious web having improved durable wettability. MANUAL CODE: CPI: A04-G01D; A05-E01C; A10-B06; A11-B05C; A11-C04E;

A12-S05G; A12-V03A; D09-C06; F02-C01; F03-C; F03-E01; F04-C01; F04-E04; F04-F03

Member (0003)

ABEQ EP 1115506 A1 UPAB 20060323

NOVELTY - Durably wettable, liquid pervious web comprises an apertured web and a continuous hydrophilic coating which is applied to the web by a remote plasma polymerization process.

DETAILED DESCRIPTION - A remote plasma process for making a durably wettable, liquid pervious web comprises(i) introducing a web outside a plasma reaction zone in a plasma reaction chamber (ii) coating at least one of the surfaces of the web with polymerized monomers to make the webs durably wet where the coating is less than 2.5 microns thick and is derived from a monomer gas stream which is introduced outside the zone. The stream provides a hydrophilic coating upon plasma polymerization. The web consists of polymeric films, apertured polymeric films, nonwovens and apertured nonwovens.

An INDEPENDENT CLAIM is also included for an absorbent article which comprises a durably wettable, liquid pervious topsheet.

USE - As a topsheet for absorbent articles such as baby and adult diapers and feminine hygiene products.

 ${\tt ADVANTAGE}$ - The web is durably wettable, liquid pervious web having improved durable wettability.

TECH

POLYMERS - Preferred Polymeric Film: The film is derived from a material consisting of polyolefin and/or polyesters(preferably polyethylene, polypropylene, poly(1-butene), poly(2-butene), poly(1-pentene), poly(2-pentene), poly(3-methyl-1-pentene), poly(4-methyl-1-pentene), 1,2-poly-1,3-butadiene, 1,4-poly-1,3-butadiene, polyisoprene, blends, random copolymers or block copolymers.

Preferred Process: The web has a Post Aging contact angle and a Post Washing contact angle that is not more than 60(preferably not more than 40, especially not more than 20)degrees greater than the Pre Aging contact

angle and Pre Washing contact angle respectively. Prior to step(ii) the process comprises the step of cleaning the surface of the web by exposing the surface to plasma conditions which comprises introduction of a gas stream containing material consisting of Ar and/or O2, or an energy source. This source is infrared, electron beam, thermionic and/or ultraviolet radiation. The process further comprises the step of modifying the hydrophilic surface by introducing the web to a surface modifying gas stream which comprises N2O and CO2 or an energy source. The final step comprises aperturing the coated web.

ORGANIC CHEMISTRY - Preferred Gas Stream: The monomer gas stream comprises a monomer containing at least one vinyl group such as acrylic and methacrylic acid of formula:

 ${\tt H2C=CR2-COOH}$, acrylates and methacrylates of formula ${\tt H2C=CR2-COOR3}$, acrylamides and methacrylamides of formula:

R2R2C=CR2-CONHR3, maleic and fumaric acid of formula:

 ${\tt HOOC-CR2=CR2-COOH,}$ maleates and fumarates of formula:

R300C-CR2=CR2COOR3, vinyl ethers of formula: (R2)(R2)C=C(R2)-O-R3,

N-vinyl-2-pyrollidone of formula (I);

vinyl acetate of formula:

(R2)(R2)C=C(R2)-OC(O)CH3 and/or aliphatic vinyl compounds of formula: R2CH=CHR3. preferably a monomer consisting of (meth)acrylic acid , hydroxyethylmethacrylate, methylmethacrylate, dimethylamino ethylmethacrylate, 2-hydroxy ethylacrylate, N,N-dimethylacrylamide, N-acryloylmorpholine and/or ethylene glycol dimethacrylate. The stream is ionized via pulsation of high frequency microwaves or radio waves. R2 = H, or 1-10C alkyl;

R3 = aliphatic hydrocarbon group of up to about 10C substituted by at least one carboxy, OH, NH2 or a (poly)ethylene oxide group optionally substituted by at least one sulfate and/or phosphate.

ABEX EXAMPLE - A test web of polyethylene film material was placed at the bottom of vacuum chamber of plasma discharge unit. Low temperature plasma was generated inside the chamber for 1 minute by supplying a high frequency electric power of 100 W at 40 kHz to expose the surface of the film to the low temperature plasma. Then, a monomer(acrylic acid) was introduced into the chamber at a constant rate to maintain constant pressure(165 m Torr). The plasma was generated for 10 minutes and then the chamber was evacuated and flooded in the atmospheric air. The treated web was tested for surface water drop contact angle and surface energy. Aged sample were kept in an oven at 74 degrees C for 16 hours before contact angle measurement. The results showed that the fresh sample surface energy(1) and aged sample surface energy(3)(dyne/cm) was greater than 60, and the fresh sample contact angle(2) and aged sample contact angle(4) degrees was 10. A comparative process carried for an polyethylene film exposed to a carrier gas(Ar)(5) and plasma discharge(6)(example 1), a film exposed to (5) and (6)(100 W) for 11 minutes(example 2), and a film placed between the electrodes(direct plasma) exposed to (5), a monomer(acrylic acid) and (6)(100 \mathbb{W} , 11 minutes)(example 3). The results showed that the measurement for (example 1) were (1) 30 (2) 100 (3) 30 and (4) 101, for(example 2) were (1) greater than 60, (2) 15, (3) 54 and (4) 57, and for(example 3) were (1) greater than 60, (2) 40, (3) 56 and (4) 53. Thus remote plasma provides a web that better retains its hydrophilicity after accelerated aging, relative to a web prepared under various other conditions.

L272 ANSWER 7 OF 10 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1999-243582 [20] WPIX

DOC. NO. CPI: C1999-070965 [20]

TITLE: Hair conditioning composition

DERWENT CLASS: A96; D21; E16; E17
INVENTOR: NAKAMURA K; TAMURA H

PATENT ASSIGNEE: (PROC-C) PROCTER & GAMBLE CO

77

COUNTRY COUNT:

PATENT INFORMATION:

PA7	CENT NO	KINI	D DATE	WEEK	LA	PG	MAIN IPC
WO	9911226	 A1	 19990311	(199920)*	EN	30[0]	A61K007-06
AU	9742302	A	19990322	(199931)	EN		
ΕP	1011611	A1	20000628	(200035)	EN		
JP	2000507976	W	20000627	(200036)	JA	35	
BR	9714855	Α	20000725	(200043)	PΤ		
CN	1275898	A	20001206	(200118)	ZH		
MX	2000002103	A1	20001001	(200158)#	ES		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
AU 9742302 A		AU 1997-42302 19970829
BR 9714855 A		BR 1997-14855 19970829
CN 1275898 A		CN 1997-182385 19970829
EP 1011611 A1		EP 1997-940551 19970829
AU 9742302 A		WO 1997-US14161 19970829
EP 1011611 A1		WO 1997-US14161 19970829
JP 2000507976	W	WO 1997-US14161 19970829
BR 9714855 A		WO 1997-US14161 19970829
CN 1275898 A		WO 1997-US14161 19970829
JP 2000507976	W	JP 1998-541591 19970829
MX 2000002103	A1	MX 2000-2103 20000229
WO 9911226 A1		WO 1997-US14161 19970829

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9742302 A EP 1011611 A1	Based on Based on	WO 9911226 A WO 9911226 A
JP 2000507976 BR 9714855 A		WO 9911226 A WO 9911226 A
PRIORITY APPLN. INE	O: MX 2000-2103 WO 1997-US14161	20000229 19970829

INT. PATENT CLASSIF.:

A61K007-06; A61K007-08 MAIN:

IPC RECLASSIF.: A61K0008-00 [I,A]; A61K0008-00 [I,C]; A61K0008-30 [I,C]; A61K0008-31 [I,A]; A61K0008-34 [I,A]; A61K0008-36 [I,A]; A61K0008-362 [I,A]; A61K0008-365 [I,A]; A61K0008-37 [I,A] ; A61K0008-42 [I,A]; A61K0008-64 [I,A]; A61K0008-72 [I,C] ; A61K0008-89 [I,A]; A61K0008-891 [I,A]; A61Q0005-12

[I,A]; A61Q0005-12 [I,C]; C08L0083-00 [I,C]; C08L0083-04 [I,A]

ECLA: A61K0008-362; A61K0008-365; A61K0008-42; A61Q0005-12

BASIC ABSTRACT:

UPAB: 20070604 WO 1999011226 A1

NOVELTY - A hair conditioning composition which provided good conditioning benefits comprises:

- (a) 0.6-9.0 wt % of an amidoamine;
- (b) 0.1-10.0 wt % of an acid

- (c) 1-15 wt % of high melting point compound having melting point of at least $25 \, \mathrm{degreesC}$; and
- (d) water, the pH of the hair conditioning composition if 2.5-4.5, and the composition is free of quaternary ammonium compounds.

DETAILED DESCRIPTION - The amidoamine is of formula: R1CONH(CH2)mN(R2)2;

R1 = 11-24 C fatty acid residue;

R2 = 1-4 C alkyl;

m = 1 - 4.

The acid is selected from acetic acid, tartaric acid, fumaric acid, lactic acid, maleic acid, succinic acid and mixtures thereof. (c) is selected from fatty alcohols, fatty acids, fatty alcohol derivatives, fatty acid derivatives, hydrocarbons, steroids and mixtures thereof.

An INDEPENDENT CLAIM is also provided for making the hair conditioning composition, by:

- (1) mixing the amidoamine, not more than 80 % of the acid or 80-100 % of the acid, and water at above 70degreesC;
- (2) adding the high melting point compound to the product from (1) at above 70degreesC; and
- (3) cooling the product from (2) to below $60 \, \mathrm{degreesC}$ and then adding the remainder of the acid.

USE - Hair conditioning compositions are provided.

ADVANTAGE - The composition provides good hair conditioning. They have good spreadability and good rinsability, provide richness and creaminess to wet hair and give dry hair good lustre and good combing feel.

MANUAL CODE:

CPI: A12-V04A; D08-B03; E10-A07; E10-B02E; E10-C02D2; E10-C02F; E10-C04D4; E10-C04J2; E10-E04L5; E10-E04M2

Member (0002)

ABEO EP 1011611 A1 UPAB 20050704

NOVELTY - A hair conditioning composition which provided good conditioning benefits comprises:

- (a) 0.6-9.0 wt % of an amidoamine;
- (b) 0.1-10.0 wt % of an acid
- (c) $1-15~\rm wt$ % of high melting point compound having melting point of at least $25\rm degreesC$; and
- (d) water, the pH of the hair conditioning composition if 2.5-4.5, and the composition is free of quaternary ammonium compounds.

DETAILED DESCRIPTION - The amidoamine is of formula: R1CONH(CH2)mN(R2)2;

R1 = 11-24 C fatty acid residue;

R2 = 1-4 C alkyl;

m = 1-4.

The acid is selected from acetic acid, tartaric acid, fumaric acid, lactic acid, maleic acid, succinic acid and mixtures thereof. (c) is selected from fatty alcohols, fatty acids, fatty alcohol derivatives, fatty acid derivatives, hydrocarbons, steroids and mixtures thereof.

An INDEPENDENT CLAIM is also provided for making the hair conditioning composition, by:

- (1) mixing the amidoamine, not more than 80 % of the acid or 80-100 % of the acid, and water at above 70degreesC;
- (2) adding the high melting point compound to the product from (1) at above 70degreesC; and
- (3) cooling the product from (2) to below $60 \, \mathrm{degreesC}$ and then adding the remainder of the acid.

USE - Hair conditioning compositions are provided.

ADVANTAGE - The composition provides good hair conditioning. They have good spreadability and good rinsability, provide richness and creaminess to wet hair and give dry hair good lustre and good combing feel.

Member (0003)

ABEQ JP 2000507976 W UPAB 20050704

NOVELTY - A hair conditioning composition which provided good conditioning benefits comprises:

- (a) 0.6-9.0 wt % of an amidoamine;
- (b) 0.1-10.0 wt % of an acid
- (c) 1-15 wt % of high melting point compound having melting point of at least $25 \, \mathrm{degrees} \, \mathrm{C}$; and
- (d) water, the pH of the hair conditioning composition if 2.5-4.5, and the composition is free of quaternary ammonium compounds.

DETAILED DESCRIPTION - The amidoamine is of formula: R1CONH(CH2)mN(R2)2;

R1 = 11-24 C fatty acid residue;

R2 = 1-4 C alkyl;

m = 1 - 4.

The acid is selected from acetic acid, tartaric acid, fumaric acid, lactic acid, maleic acid, succinic acid and mixtures thereof. (c) is selected from fatty alcohols, fatty acids, fatty alcohol derivatives, fatty acid derivatives, hydrocarbons, steroids and mixtures thereof.

An INDEPENDENT CLAIM is also provided for making the hair conditioning composition, by:

- (1) mixing the amidoamine, not more than 80 % of the acid or 80-100 % of the acid, and water at above 70degreesC;
- (2) adding the high melting point compound to the product from (1) at above 70degreesC; and
- (3) cooling the product from (2) to below $60 \, \mathrm{degreesC}$ and then adding the remainder of the acid.

USE - Hair conditioning compositions are provided.

ADVANTAGE - The composition provides good hair conditioning. They have good spreadability and good rinsability, provide richness and creaminess to wet hair and give dry hair good lustre and good combing feel.

Member (0005)

ABEQ CN 1275898 A UPAB 20050704

NOVELTY - A hair conditioning composition which provided good conditioning benefits comprises:

- (a) 0.6-9.0 wt % of an amidoamine;
- (b) 0.1-10.0 wt % of an acid
- (c) 1-15 wt % of high melting point compound having melting point of at least 25 degreesC; and
- (d) water, the pH of the hair conditioning composition if 2.5-4.5, and the composition is free of quaternary ammonium compounds.

DETAILED DESCRIPTION - The amidoamine is of formula: R1CONH(CH2)mN(R2)2;

R1 = 11-24 C fatty acid residue;

R2 = 1-4 C alkyl;

m = 1-4.

The acid is selected from acetic acid, tartaric acid, fumaric acid, lactic acid, maleic acid, succinic acid and mixtures thereof. (c) is selected from fatty alcohols, fatty acids, fatty alcohol derivatives, fatty acid derivatives, hydrocarbons, steroids and mixtures thereof.

An INDEPENDENT CLAIM is also provided for making the hair conditioning composition, by:

- (1) mixing the amidoamine, not more than 80 % of the acid or 80-100 % of the acid, and water at above 70degreesC;
- (2) adding the high melting point compound to the product from (1) at above 70degreesC; and
 - (3) cooling the product from (2) to below 60degreesC and then

adding the remainder of the acid.

USE - Hair conditioning compositions are provided.

ADVANTAGE - The composition provides good hair conditioning. They have good spreadability and good rinsability, provide richness and creaminess to wet hair and give dry hair good lustre and good combing feel.

TECH

ORGANIC CHEMISTRY - Preferred Composition: The composition further comprises an oily compound having a melting point of not more than 25degreesC selected from a first oily compound, a second oily compound and mixtures of these. The composition further comprises an additional conditioning agent selected from cationic polymers, silicones, proteins and mixtures thereof. The high melting point compound is selected from pure cetyl alcohol, pure stearyl alcohol and pure behenyl alcohol.

ABEX EXAMPLE - A hair rinse composition was prepared comprising: stearamidopropyldimethylamine (2.0 wt %), lactic acid (1.09 wt %), cetyl alcohol (2.4 wt %), stearyl alcohol (3.6 wt %), silicones (3.0 wt %), benzyl alcohol (0.4 wt %), EDTA (0.1 wt %), Kathon CG(mixture of methylchloroisothiazoline and methylisothiazoline). The compositions provide richness and creaminess to the wet hair, and also show good combing feel and good lustre when the hair is dry.

L272 ANSWER 8 OF 10 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1998-594729 [50] WPIX

DOC. NO. CPI: C1998-178458 [50]

TITLE: Personal care composition containing silicone grafted

adhesive polymer - used in hair care, cosmetic and nail

compositions

DERWENT CLASS: A18; A26; A96; B07; D21 INVENTOR: MCDONOUGH S P; MIDHA S

PATENT ASSIGNEE: (MCDO-I) MCDONOUGH S P; (MIDH-I) MIDHA S; (PROC-C)

PROCTER & GAMBLE CO

COUNTRY COUNT: 82

PATENT INFORMATION:

PATENT NO	KINI	DATE	WEEK	LA	PG	MAIN IPC
WO 9848776	A1	19981105	(199850)*	EN	47[0]	
ZA 9803501	Α	19990127	(199910)	EN	43	
AU 9871570	Α	19981124	(199914)	ΕN		
EP 977551	A1	20000209	(200012)	ΕN		
CZ 9903781	А3	20000412	(200026)	CS		
CN 1260711	Α	20000719	(200055)	ZH		
AU 730542	В	20010308	(200119)	ΕN		
HU 2000003135	A2	20010228	(200121)	HU		
MX 9909796	A1	20000301	(200123)	ES		
JP 2001507366	W	20010605	(200138)	JA	45	
KR 2001020290	A	20010315	(200157)	KO		
BR 9808997	Α	20020115	(200214)	PΤ		
US 20020064537	A1	20020530	(200240)	ΕN		
US 6555117	В2	20030429	(200331)	ΕN		
MX 223049	В	20040928	(200554)	ES		
CN 1157179	С	20040714	(200612)	ZH		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION		DATE
WO 9848776 A1		WO	1998-US8285	19980424

US	2002006453	7 A1	US	1997-846058 19970425
US	6555117 B2		US	1997-846058 19970425
AU	9871570 A		AU	1998-71570 19980424
AU	730542 B		AU	1998-71570 19980424
BR	9808997 A		BR	1998-8997 19980424
CN	1260711 A		CN	1998-806180 19980424
ΕP	977551 A1		EP	1998-918693 19980424
JΡ	2001507366	W	JP	1998-547174 19980424
ΕP	977551 A1		WO	1998-US8285 19980424
CZ	9903781 A3		WO	1998-US8285 19980424
HU	2000003135	A2	WO	1998-US8285 19980424
JΡ	2001507366	W	WO	1998-US8285 19980424
BR	9808997 A		WO	1998-US8285 19980424
MX	223049 B		WO	1998-US8285 19980424
ZA	9803501 A		ZA	1998-3501 19980424
CZ	9903781 A3		CZ	1999-3781 19980424
KR	2001020290	A	KR	1999-709892 19991025
MX	9909796 A1		MX	1999-9796 19991025
$\mathbb{M}\mathbb{X}$	223049 B		MX	1999-9796 19991025
HU	2000003135	A2	HU	2000-3135 19980424
CN	1157179 C		CN	1998-806180 19980424

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 730542 B AU 9871570 A EP 977551 A1		AU 9871570 A WO 9848776 A WO 9848776 A
CZ 9903781 A3		WO 9848776 A
AU 730542 B	Based on	WO 9848776 A
HU 2000003135 A	2 Based on	WO 9848776 A
JP 2001507366 W	Based on	WO 9848776 A
BR 9808997 A	Based on	WO 9848776 A
MX 223049 B	Based on	WO 9848776 A
PRIORITY APPLN. INFO:		19970425
THE DAMES OF 3 CO.T.	WO 1998-US8285	19980424
INT. PATENT CLASSIF.: MAIN:	7617007 00. 7617007 0	C . 7 C1K007 40
MAIN: SECONDARY:	A61K007-00; A61K007-0	6; A61K007-48 27; A61K007-043; A61K007-06;
SECONDARI:	•	2; A61K007-42; A61K007-48
IPC RECLASSIF.:	•	1K0008-00 [I,C]; A61K0008-72 [I,A];
IIC RECLASSIF		1K0008-89 [I,A]; A61K0008-91 [I,A];
		1Q0001-00 [I,C]; A61Q0001-02 [I,C];
		1Q0001-10 [I,A]; A61Q0001-12 [I,A];
		1Q0015-00 [I,A]; A61Q0015-00 [I,C];
		1Q0017-04 [I,C]; A61Q0019-00 [I,A];
	A61Q0019-00 [I,C]; A6	1Q0003-02 [I,A]; A61Q0003-02 [I,C];
		1Q0005-00 [I,C]; A61Q0005-02 [I,A];
	A61Q0005-02 [I,C]; A6	1Q0005-06 [I,A]; A61Q0005-06 [I,C];
	A61Q0007-00 [I,A]; A6	1Q0007-00 [I,C]; C08L0083-00 [I,C];
	C08L0083-07 [I,A]	
ECLA:		8-91; A61Q0005-02; A61Q0005-06;
	A61Q0015-00; A61Q0017	-04; A61Q0019-00
BASIC ABSTRACT:		

WO 1998048776 A1 UPAB: 20060115

A personal care composition comprises:(a) a silicone grafted adhesive polymer, wherein the polymer has an organic polymer backbone comprising: (1) at least one monomer wherein the monomer is polymerised as a homopolymer

having Tg of about $-120\,^{\circ}\text{C}$ to about $25\,^{\circ}\text{C}$ and (2) at least one monomer which is polymerised as a homopolymer having Tg of from above $25\,^{\circ}\text{C}$ to about $250\,^{\circ}\text{C}$; and wherein the polymer has silicone macromers grafted to the backbone and the number average molecular weight of the silicone macromers is greater than 1000; and (b) a personal care carrier.

USE - The personal care compositions may be e.g. hair care, cosmetic and nail compositions. Products include shampoos, soaps, lotions, creams, antiperspirants, nail enamels, lipsticks, foundations, mascaras, sunscreens, hair sprays, mousses and hair setting tonics. The polymer may be used to improve stylesetting or hold in hair care products, to provide thickening and improve feel properties. MANUAL CODE:

CPI: A06-A00E3; A12-V04; B04-C03B; B04-C03C; B04-C03D;

B14-N17; B14-R01; B14-R02; D08-B

Member (0002)

ABEQ ZA 9803501 A UPAB 20060115

A personal care composition comprises:(a) a silicone grafted adhesive polymer, wherein the polymer has an organic polymer backbone comprising: (1) at least one monomer wherein the monomer is polymerised as a homopolymer having Tg of about $-120\,^{\circ}\text{C}$ to about $25\,^{\circ}\text{C}$ and (2) at least one monomer which is polymerised as a homopolymer having Tg of from above $25\,^{\circ}\text{C}$ to about $250\,^{\circ}\text{C}$; and wherein the polymer has silicone macromers grafted to the backbone and the number average molecular weight of the silicone macromers is greater than 1000; and (b) a personal care carrier.

USE - The personal care compositions may be e.g. hair care, cosmetic and nail compositions. Products include shampoos, soaps, lotions, creams, antiperspirants, nail enamels, lipsticks, foundations, mascaras, sunscreens, hair sprays, mousses and hair setting tonics. The polymer may be used to improve style-setting or hold in hair care products, to provide thickening and improve feel properties.

Member (0004)

ABEQ EP 977551 A1 UPAB 20060115

A personal care composition comprises:(a) a silicone grafted adhesive polymer, wherein the polymer has an organic polymer backbone comprising: (1) at least one monomer wherein the monomer is polymerised as a homopolymer having Tg of about $-120\,^{\circ}\text{C}$ to about $25\,^{\circ}\text{C}$ and (2) at least one monomer which is polymerised as a homopolymer having Tg of from above $25\,^{\circ}\text{C}$ to about $250\,^{\circ}\text{C}$; and wherein the polymer has silicone macromers grafted to the backbone and the number average molecular weight of the silicone macromers is greater than 1000; and (b) a personal care carrier.

USE - The personal care compositions may be e.g. hair care, cosmetic and nail compositions. Products include shampoos, soaps, lotions, creams, antiperspirants, nail enamels, lipsticks, foundations, mascaras, sunscreens, hair sprays, mousses and hair setting tonics. The polymer may be used to improve style-setting or hold in hair care products, to provide thickening and improve feel properties.

Member (0006)

ABEQ CN 1260711 A UPAB 20060115

A personal care composition comprises:(a) a silicone grafted adhesive polymer, wherein the polymer has an organic polymer backbone comprising: (1) at least one monomer wherein the monomer is polymerised as a homopolymer having Tg of about -120°C to about 25°C and (2) at least one monomer which is polymerised as a homopolymer having Tg of from above 25°C to about 250°C; and wherein the polymer has silicone macromers grafted to the backbone and the number average molecular weight of the silicone macromers is greater than 1000; and (b) a

personal care carrier.

USE - The personal care compositions may be e.g. hair care, cosmetic and nail compositions. Products include shampoos, soaps, lotions, creams, antiperspirants, nail enamels, lipsticks, foundations, mascaras, sunscreens, hair sprays, mousses and hair setting tonics. The polymer may be used to improve style-setting or hold in hair care products, to provide thickening and improve feel properties.

Member (0010)

ABEQ JP 2001507366 W UPAB 20060115

A personal care composition comprises:(a) a silicone grafted adhesive polymer, wherein the polymer has an organic polymer backbone comprising: (1) at least one monomer wherein the monomer is polymerised as a homopolymer having Tg of about $-120\,^{\circ}\text{C}$ to about $25\,^{\circ}\text{C}$ and (2) at least one monomer which is polymerised as a homopolymer having Tg of from above $25\,^{\circ}\text{C}$ to about $250\,^{\circ}\text{C}$; and wherein the polymer has silicone macromers grafted to the backbone and the number average molecular weight of the silicone macromers is greater than 1000; and (b) a personal care carrier.

USE - The personal care compositions may be e.g. hair care, cosmetic and nail compositions. Products include shampoos, soaps, lotions, creams, antiperspirants, nail enamels, lipsticks, foundations, mascaras, sunscreens, hair sprays, mousses and hair setting tonics. The polymer may be used to improve style-setting or hold in hair care products, to provide thickening and improve feel properties.

L272 ANSWER 9 OF 10 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 1996-259581 [26] WPIX

DOC. NO. CPI: C1996-082161 [26] DOC. NO. NON-CPI: N1996-218388 [26]

TITLE: Porous absorbent structure for e.g. diapers, seed sheets,

ion exchange materials etc. - comprises flexible

aggregate containing crosslinked particles of water-insol.

polymer forming hydrogel coated with latex sintered at

low temperature

DERWENT CLASS: A14; A32; A96; A97; B07; D22; F07; J01; P32; P34; P73

INVENTOR: HSUEH K; HSUEH K R; REZAI E; SHIMIZU M

PATENT ASSIGNEE: (PROC-C) PROCTER & GAMBLE CO

COUNTRY COUNT: 66

PATENT INFORMATION:

PA'	TENT NO	KINI	D DATE	WEEK	LA	PG	MAIN	IPC
WO	9614885	A1	19960523	(199626)*	EN	50[7]		
ΑU	9539710	A	19960606	(199637)	EN			
ZA	9509384	А	19960828	(199639)	EN	48[0]		
TW	301604	А	19970401	(199726)	ZH			
EP	790839	A1	19970827	(199739)	EN	[0]		
JΡ	10509362	W	19980914	(199847)	JA	62		
KR	97706851	А	19971201	(199847)	KO			
US	5859074	A	19990112	(199910)	EN			
AU	9928116	A	19990708	(199938)#	EN			
MX	9703450	A1	19980701	(200012)	ES			
EP	790839	В1	20010822	(200149)	EN			
DE	69522338	E	20010927	(200164)	DE			
ES	2159649	Т3	20011016	(200173)	ES			
MX	207604	В	20020426	(200363)	ES			
CA	2205039	С	20030923	(200369)	EN			

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION DATE
WO 9614885 A1	WO 1995-US13982 19951030
AU 9539710 A	AU 1995-39710 19951030
AU 9928116 A Div Ex	AU 1995-39710 19951030
CA 2205039 C	CA 1995-2205039 19951030
DE 69522338 E	DE 1995-69522338 19951030
EP 790839 A1	EP 1995-937672 19951030
EP 790839 B1	EP 1995-937672 19951030
DE 69522338 E	EP 1995-937672 19951030
ES 2159649 T3	EP 1995-937672 19951030
EP 790839 A1	WO 1995-US13982 19951030
KR 97706851 A	WO 1995-US13982 19951030
JP 10509362 W	WO 1995-US13982 19951030
US 5859074 A	WO 1995-US13982 19951030
EP 790839 B1	WO 1995-US13982 19951030
DE 69522338 E	WO 1995-US13982 19951030
MX 207604 B	WO 1995-US13982 19951030
CA 2205039 C	WO 1995-US13982 19951030
ZA 9509384 A	ZA 1995-9384 19951106
TW 301604 A	TW 1995-113267 19951213
JP 10509362 W	JP 1996-516089 19951030
KR 97706851 A	KR 1997-703137 19970509
MX 9703450 A1	MX 1997-3450 19970509
MX 207604 B	MX 1997-3450 19970509
US 5859074 A	US 1997-836333 19970509
AU 9928116 A	AU 1999-28116 19990513

FILING DETAILS:

PATENT NO	KIND E	PATENT NO
	Based on E	
	Based on E	
	Based on V	
EP 790839 A1	Based on V	NO 9614885 A
KR 97706851 A	Based on V	NO 9614885 A
JP 10509362 W	Based on V	NO 9614885 A
US 5859074 A	Based on V	NO 9614885 A
EP 790839 B1	Based on V	NO 9614885 A
DE 69522338 E	Based on V	NO 9614885 A
CA 2205039 C	Based on V	WO 9614885 A
PRIORITY APPLN. INFO:	AU 1994-9310 19	9941109
	WO 1995-US13982 19	9951030
	AU 1999-28116 19	9990513
INT. PATENT CLASSIF.:		
MAIN:	A61F013-15; A61F013-46;	; A61L015-00; A61L015-24;
	A61L015-60	
IPC RECLASSIF.:	A61F0013-15 [I,A]; A61E	F0013-15 [I,C]; A61F0013-53 [I,A];
	A61L0015-16 [I,C]; A61I	L0015-24 [I,A]; A61L0015-42 [I,A];
	A61L0015-60 [I,A]	
ECLA:	A61L0015-24+C08L33/08;	A61L0015-24+C08L33/14;
	A61L0015-42E; A61L0015-	-60
BASIC ABSTRACT:		

WO 1996014885 A1 UPAB: 20060110

A porous, absorbent macrostructure comprises a flexible, inter-particle bonded aggregate comprising (a) interconnected, crosslinked particles of

water-insol., absorbent, hydrogel-forming polymer, coated with (b) a latex which can be sintered at not above $25\,^{\circ}\text{C}$, is (somewhat) hydrophilic when sintered and has Tg not above $25\,^{\circ}\text{C}$ when sintered. The latex imparts increased flexibility to the bonded aggregate.

Also claimed is an absorbent article comprising a liquid pervious top sheet, a liquid impervious back sheet and an absorbent core between, comprising the macrostructure.

USE - The structure is used in diapers, adult incontinence pads, sanitary towels, packing containers, devices for delivering drugs or treating wounds or burns, as ion-exchange column materials, as constructed materials, agricultural or horticultural materials (e.g. seed sheets or water-retentive materials), sludge or oil dewatering agents, materials for preventing dew formation, dessicants and humidity control materials.

ADVANTAGE - The structures are more flexible, and more stable at high temperature (e.g. 50°C) and low RH (e.g. 20%). MANUAL CODE: CPI: A07-B; A09-A08; A11-B05; A12-S09; A12-V03C1;

B04-C02D; B04-C03C; B12-M02D; D09-C04B; F04-C01; F04-E04; J01-D04

Member (0003)

ABEQ ZA 9509384 A UPAB 20060110

A porous, absorbent macrostructure comprises a flexible, inter-particle bonded aggregate comprising (a) interconnected, crosslinked particles of water-insol., absorbent, hydrogel-forming polymer, coated with (b) a latex which can be sintered at not above $25\,^{\circ}\text{C}$, is (somewhat) hydrophilic when sintered and has Tg not above $25\,^{\circ}\text{C}$ when sintered. The latex imparts increased flexibility to the bonded aggregate.

Also claimed is an absorbent article comprising a liq. pervious top sheet, a liq. impervious back sheet and an absorbent core between, comprising the macrostructure.

USE - The structure is used in diapers, adult incontinence pads, sanitary towels, packing containers, devices for delivering drugs or treating wounds or burns, as ion-exchange column materials, as constructed materials, agricultural or horticultural materials (e.g. seed sheets or water-retentive materials), sludge or oil dewatering agents, materials for preventing dew formation, dessicants and humidity control materials.

ADVANTAGE - The structures are more flexible, and more stable at high temp. (e.g. $50\,^{\circ}\text{C}$) and low RH (e.g. $20\,^{\circ}$).

Member (0006)

ABEO JP 10509362 W UPAB 20060110

A porous, absorbent macrostructure comprises a flexible, inter-particle bonded aggregate comprising (a) interconnected, crosslinked particles of water-insol., absorbent, hydrogel-forming polymer, coated with (b) a latex which can be sintered at not above 25°C, is (somewhat) hydrophilic when sintered and has Tg not above 25°C when sintered. The latex imparts increased flexibility to the bonded aggregate. Also claimed is an absorbent article comprising a liq. pervious top sheet, a liq. impervious back sheet and an absorbent core between, comprising the

a liq. impervious back sheet and an absorbent core between, comprising the macrostructure.

USE - The structure is used in diapers, adult incontinence pads, sanitary towels, packing containers, devices for delivering drugs or treating wounds or burns, as ion-exchange column materials, as constructed materials, agricultural or horticultural materials (e.g. seed sheets or water-retentive materials), sludge or oil dewatering agents, materials for preventing dew formation, dessicants and humidity control materials.

ADVANTAGE - The structures are more flexible, and more stable at high temp. (e.g. 50° C) and low RH (e.g. 20°).

Member (0008)

ABEQ US 5859074 A UPAB 20060110

A porous, absorbent macrostructure comprises a flexible, inter-particle bonded aggregate comprising (a) interconnected, crosslinked particles of water-insol., absorbent, hydrogel-forming polymer, coated with (b) a latex which can be sintered at not above 25°C, is (somewhat) hydrophilic when sintered and has Tg not above 25°C when sintered. The latex imparts increased flexibility to the bonded aggregate.

Also claimed is an absorbent article comprising a liq. pervious top sheet, a liq. impervious back sheet and an absorbent core between, comprising the macrostructure.

USE - The structure is used in diapers, adult incontinence pads, sanitary towels, packing containers, devices for delivering drugs or treating wounds or burns, as ion-exchange column materials, as constructed materials, agricultural or horticultural materials (e.g. seed sheets or water-retentive materials), sludge or oil dewatering agents, materials for preventing dew formation, dessicants and humidity control materials.

ADVANTAGE - The structures are more flexible, and more stable at high temp. (e.g. $50\,^{\circ}\text{C}$) and low RH (e.g. $20\,^{\circ}$).

Member (0011)

ABEQ EP 790839 B1 UPAB 20060110

A porous, absorbent macrostructure comprises a flexible, inter-particle bonded aggregate comprising (a) interconnected, crosslinked particles of water-insol., absorbent, hydrogel-forming polymer, coated with (b) a latex which can be sintered at not above 25°C, is (somewhat) hydrophilic when sintered and has Tg not above 25°C when sintered. The latex imparts increased flexibility to the bonded aggregate.

Also claimed is an absorbent article comprising a liq. pervious top sheet, a liq. impervious back sheet and an absorbent core between, comprising the macrostructure.

USE - The structure is used in diapers, adult incontinence pads, sanitary towels, packing containers, devices for delivering drugs or treating wounds or burns, as ion-exchange column materials, as constructed materials, agricultural or horticultural materials (e.g. seed sheets or water-retentive materials), sludge or oil dewatering agents, materials for preventing dew formation, dessicants and humidity control materials.

ADVANTAGE - The structures are more flexible, and more stable at high temp. (e.g. $50\,^{\circ}$ C) and low RH (e.g. $20\,^{\circ}$).

=> d ibib ab hitstr 10
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX, USPATFULL' - CONTINUE? (Y)/N:y

L272 ANSWER 10 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2005:22756 USPATFULL <u>Full-text</u>

TITLE: Transfer-resistant cosmetic compositions INVENTOR(S): Bekele, Haimanot, Baltimore, MD, UNITED

STATES

Deckner, George Endel, Cincinnati, OH, UNITED

STATES

PATENT ASSIGNEE(S): The <u>Procter & Gamble Company</u> (U.S.

corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005019298	A1	20050127	
APPLICATION INFO.:	US 2004-824298	A1	20040414	(10)

NUMBER DATE

PRIORITY INFORMATION: US 2003-462864P 20030414 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: THE PROCTER & GAMBLE COMPANY, INTELLECTUAL PROPERTY

DIVISION, WINTON HILL TECHNICAL CENTER - BOX 161, 6110

CENTER HILL AVENUE, CINCINNATI, OH, 45224

NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The cosmetic compositions of the present invention provide a durable film after application that resists degradation over time. Cosmetic compositions of the present invention comprise:

- a) polymers selected from the group consisting of hydrophilic copolymers and terpolymers;
- b) Glycerols selected from the group consisting of glycerol, modified glycerols, and mixtures thereof; and
- c) a polar volatile solvent.
- IT 39990-17-5, 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer

(transfer-resistant cosmetics containing hydrophilic polymers and glycerols and volatile solvents)

- RN 39990-17-5 USPATFULL
- CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 4-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 868-77-9 CMF C6 H10 O3

=> file stnguide FILE 'STNGUIDE' ENTERED AT 10:17:44 ON 14 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2008 (20080307/UP).

```
=> d his ful
    (FILE 'HOME' ENTERED AT 08:52:33 ON 14 MAR 2008)
    FILE 'STNGUIDE' ENTERED AT 08:52:36 ON 14 MAR 2008
    FILE 'HCAPLUS' ENTERED AT 08:52:46 ON 14 MAR 2008
             ACT PAG298HCAAPP/A
             1 SEA ABB=ON PLU=ON US2004-824298/APPS
T.1
    FILE 'WPIX' ENTERED AT 08:52:59 ON 14 MAR 2008
             ACT PAG298WPIAPP/A
             _____
L2
             1 SEA ABB=ON PLU=ON US2004-824298/APPS
    FILE 'REGISTRY' ENTERED AT 08:53:09 ON 14 MAR 2008
             ACT PAG298REGAPP/A
             _____
L3 (
            1) SEA ABB=ON PLU=ON US2004-824298/APPS
              SEL PLU=ON L3 1- RN: 8 TERMS
L4
            8 SEA ABB=ON PLU=ON L4
L5
             _____
              ACT PAG298CLMPOL/A
             _____
            1) SEA ABB=ON PLU=ON US2004-824298/APPS
L6 (
L7
             SEL PLU=ON L6 1- RN : 8 TERMS
L8 (
            8) SEA ABB=ON PLU=ON L7
           14) SEA ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 O3) X"/MF
L9 (
            1 SEA ABB=ON PLU=ON L8 AND L9
L10
             ACT PAG298CRNPOL/A
             _____
           1) SEA ABB=ON PLU=ON US2004-824298/APPS
L11 (
             SEL PLU=ON L11 1- RN: 8 TERMS
L12
           8) SEA ABB=ON PLU=ON L12
L13 (
          14)SEA ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 O3)X"/MF
L14 (
           1)SEA ABB=ON PLU=ON L13 AND L14
L15 (
           177) SEA ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CRN
L16 (
L17 (
           177) SEA ABB=ON PLU=ON L16 AND PMS/CI
L18
           177 SEA ABB=ON PLU=ON L17 OR L15
             _____
              ACT PAG298PSET1/A
              _____
L19
              STR
L20
              STR
L21
              SCR 2043
L22
           414 SEA SSS FUL (L21 AND L20 AND L19)
              _____
              D SAVED
              ACT PAG298PLX/A
            1) SEA ABB=ON PLU=ON US2004-824298/APPS
L23 (
             SEL PLU=ON L23 1- RN : 8 TERMS
```

8) SEA ABB=ON PLU=ON L24

1) SEA ABB=ON PLU=ON L25 AND L26

14) SEA ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 O3) X"/MF

L25 (

L26 (

L27 (

```
L28 (
        177) SEA ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CRN
L29 (
          177) SEA ABB=ON PLU=ON L28 AND PMS/CI
L30 (
          177)SEA ABB=ON PLU=ON L29 OR L27
             STR
L31
L32
              STR
L33
              SCR 2043
         414)SEA SSS FUL (L33 AND L32 AND L31)
L34 (
          414) SEA ABB=ON PLU=ON L27 OR L30 OR L34
L35 (
           0)SEA ABB=ON PLU=ON L35 AND RELATED POLYMERS/FA
L36 (
L37 (
          414) SEA ABB=ON PLU=ON L36 OR L35
L38
          414 SEA ABB=ON PLU=ON (L35 OR L37)
             _____
              ACT PAG298POLYAC/A
             _____
            1) SEA ABB=ON PLU=ON US2004-824298/APPS
L39 (
L40
             SEL PLU=ON L39 1- RN : 8 TERMS
L41 (
            8)SEA ABB=ON PLU=ON L40
            2 SEA ABB=ON PLU=ON L41 AND ("(C3 H4 O2)X" OR "(C9 H18 N O2 .
L42
              CL)X")/MF
              _____
             ACT PAG298ETOH/A
             _____
L43 (
            1) SEA ABB=ON PLU=ON US2004-824298/APPS
             SEL PLU=ON L43 1- RN : 8 TERMS
T.44
            8) SEA ABB=ON PLU=ON L44
L45 (
            1 SEA ABB=ON PLU=ON L45 AND "C2 H6 O"/MF
L46
              _____
              ACT PAG298TITAN/A
             _____
L47 (
            1) SEA ABB=ON PLU=ON US2004-824298/APPS
T.48
             SEL PLU=ON L47 1- RN : 8 TERMS
            8) SEA ABB=ON PLU=ON L48
L49 (
            1 SEA ABB=ON PLU=ON L49 AND TI/ELS
L50
             ACT PAG298GLYCER/A
              _____
L51
            1 SEA ABB=ON PLU=ON 56-81-5/RN
              ACT PAG298GLYETH/A
              _____
L52 (
            1) SEA ABB=ON PLU=ON GLYCERETH/CN
L53 (
            1) SEA ABB=ON PLU=ON "GLYCERETH 26"/CN OR "GLYCERETH 7"/CN
            1 SEA ABB=ON PLU=ON (L52 OR L53)
L54
    FILE 'HCAPLUS' ENTERED AT 08:55:41 ON 14 MAR 2008
             ACT PAG298HCAINV/A
            1)SEA ABB=ON PLU=ON US2004-824298/APPS
L55 (
L56
             SEL PLU=ON L55 1- RN : 8 TERMS
L57 (
            8) SEA ABB=ON PLU=ON L56
L58 (
          14) SEA ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 O3) X"/MF
L59 (
           1) SEA ABB=ON PLU=ON L57 AND L58
         177)SEA ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CRN 177)SEA ABB=ON PLU=ON L60 AND PMS/CI
L60 (
L61 (
          177) SEA ABB=ON PLU=ON L61 OR L59
L62 (
L63
              STR
              STR
L64
            SCR 2043
        SCR 2043
414)SEA SSS FUL (L65 AND L64 AND L63)
L65
L66 (
```

```
L67 (
          414) SEA ABB=ON PLU=ON L59 OR L62 OR L66
L68 (
            0)SEA ABB=ON PLU=ON L67 AND RELATED POLYMERS/FA
L69 (
          414) SEA ABB=ON PLU=ON L68 OR L67
L70 (
          414) SEA ABB=ON PLU=ON (L67 OR L69)
              QUE ABB=ON PLU=ON BEKELE, H?/AU
L71
              QUE ABB=ON PLU=ON DECKNER, G?/AU
L72
L73
              QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L74 (
          244) SEA ABB=ON PLU=ON L70
            1) SEA ABB=ON PLU=ON L74 AND (L71 OR L72 OR L73)
L75 (
            1) SEA ABB=ON PLU=ON L55 AND L75
L76 (
L77
            1 SEA ABB=ON PLU=ON (L75 OR L76)
             _____
              ACT PAG298HCAB/A
            1) SEA ABB=ON PLU=ON US2004-824298/APPS
L78 (
L79
             SEL PLU=ON L78 1- RN : 8 TERMS
L80 (
            8) SEA ABB=ON PLU=ON L79
L81 (
           14) SEA ABB=ON PLU=ON "(C7 H12 O3 . C6 H10 O3) X"/MF
            1) SEA ABB=ON PLU=ON L80 AND L81
L82 (
         177) SEA ABB=ON PLU=ON 2478-10-6/CRN AND 868-77-9/CRN 177) SEA ABB=ON PLU=ON L83 AND PMS/CI
L83 (
L84 (
          177) SEA ABB=ON PLU=ON L84 OR L82
L85 (
L86
              STR
L87
               STR
L88
              SCR 2043
         414) SEA SSS FUL (L88 AND L87 AND L86)
L89 (
L90 (
          414)SEA ABB=ON PLU=ON L82 OR L85 OR L89
           0)SEA ABB=ON PLU=ON L90 AND RELATED POLYMERS/FA
L91 (
          414) SEA ABB=ON PLU=ON L91 OR L90
L92 (
L93 (
          414) SEA ABB=ON PLU=ON (L90 OR L92)
            2) SEA ABB=ON PLU=ON L80 AND ("(C3 H4 O2)X" OR "(C9 H18 N O2 .
L94 (
              CL)X")/MF
            1)SEA ABB=ON PLU=ON L80 AND "C2 H6 O"/MF
L95 (
L96 (
            1)SEA ABB=ON PLU=ON L80 AND TI/ELS
L97 (
            1)SEA ABB=ON PLU=ON 56-81-5/RN
L98 (
            1) SEA ABB=ON PLU=ON GLYCERETH/CN
L99 (
            1) SEA ABB=ON PLU=ON "GLYCERETH 26"/CN OR "GLYCERETH 7"/CN
            1) SEA FILE=REGISTRY ABB=ON PLU=ON (L98 OR L99)
L100(
             QUE ABB=ON PLU=ON BEKELE, H?/AU
L101
              QUE ABB=ON PLU=ON DECKNER, G?/AU
L102
              QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA
L103
L104
              QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY<2003
              OR REVIEW/DT
L105
             OUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
             OUE ABB=ON PLU=ON ?GLYCERYL?(1T)ETHER?
L106
L107
             QUE ABB=ON PLU=ON ?GLYCERYL?(3A)ETHER?
              QUE ABB=ON PLU=ON POLAR?
L108
L109
             QUE ABB=ON PLU=ON WATER OR H2O OR AQ OR AQUEOUS?
L110
             QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETOH
L111
             QUE ABB=ON PLU=ON CATION?
L112
             OUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?) OR
              (POLY(1T)?ACRYLAT?)
              QUE ABB=ON PLU=ON ETHOXYL?
L113
              QUE ABB=ON PLU=ON ?GLYCOL?
L114
L115
              QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL OR
              GLYCOL OR TRIOL
              QUE ABB=ON PLU=ON ?PIGMENT?
L116
              OUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMINA OR
L117
               BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR? OR
               TITANIUM OR TITANIA OR TITANAT? OR MICA
```

```
L118
              QUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HYGIEN?
L119
              QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
L120
              QUE ABB=ON PLU=ON COSMETICS
L121
              QUE ABB=ON PLU=ON ETHERS+PFT,OLD,NEW,NT/CT (L)?GLYCERYL?
               QUE ABB=ON PLU=ON ?GLYCERETH?
L122
               QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L123
L124
               QUE ABB=ON PLU=ON PIGMENTS+PFT,OLD,NEW,NT/CT
L125
               QUE ABB=ON PLU=ON "PIGMENTS, NONBIOLOGICAL"+PFT,OLD,NEW,NT/CT
          244) SEA FILE=HCAPLUS ABB=ON PLU=ON L93
L126(
           10)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND ((L94 OR L95 OR L96)
L127(
            3) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND COSMET?/SC, SX
L128(
             7) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L118 OR L119 OR L120
L129(
L130(
            1)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND ((L106 OR L107) OR L1
            16) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND L112
L131(
L132(
          112) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L108 OR L109 OR L110
L133(
            2) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND ((L113(4A)L114) OR L1
           87) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND L115
L134(
            70)SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L116 OR L117 OR L123
L135(
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 AND (L101 OR L102 OR L103
L136(
L137(
            1)SEA FILE=HCAPLUS ABB=ON PLU=ON L78 AND L136
            1) SEA FILE=HCAPLUS ABB=ON PLU=ON (L136 OR L137)
L138(
          243) SEA FILE=HCAPLUS ABB=ON PLU=ON L126 NOT L138
191) SEA FILE=HCAPLUS ABB=ON PLU=ON L139 AND (L104 OR L105)
L140(
          144) SEA FILE=HCAPLUS ABB=ON PLU=ON L140 AND (L127 OR L128 OR L129
L141(
            2) SEA FILE=HCAPLUS ABB=ON PLU=ON L140 AND L82
L142(
           90)SEA FILE=HCAPLUS ABB=ON PLU=ON L140 AND L85
L143(
L144(
           90)SEA FILE=HCAPLUS ABB=ON PLU=ON (L142 OR L143)
           65)SEA FILE=HCAPLUS ABB=ON PLU=ON L141 AND L144
L145(
            5) SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND (L127 OR L128 OR L129
L146(
            0) SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND L133
L147(
           23) SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND L135
L148(
           7)SEA FILE=HCAPLUS ABB=ON PLU=ON L145 AND (L109 AND (L110 OR L1 30)SEA FILE=HCAPLUS ABB=ON PLU=ON (L146 OR L147 OR L148 OR L149)
L149(
L150(
L151(
             4) SEA FILE=HCAPLUS ABB=ON PLU=ON L150 AND L111
             30 SEA ABB=ON PLU=ON (L150 OR L151)
L152
```

FILE 'STNGUIDE' ENTERED AT 08:56:13 ON 14 MAR 2008

FILE 'WPIX' ENTERED AT 08:58:39 ON 14 MAR 2008 ACT PAG298WPINV/A

L153 QUE ABB=ON PLU=ON BEKELE, H?/AU
L154 QUE ABB=ON PLU=ON DECKNER, G?/AU
L155 QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA

L156(1107)SEA FILE=WPIX ABB=ON PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022 L157 8 SEA ABB=ON PLU=ON L156 AND (L153 OR L154 OR L155)

ACE DACOCOLIDAD

ACT PAG298WPIB/A

L158 QUE ABB=ON PLU=ON BEKELE, H?/AU QUE ABB=ON PLU=ON DECKNER, G?/AU L159 QUE ABB=ON PLU=ON (PROCTER OR GAMBLE)/CS,SO,PA L160 L161 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 L162 QUE ABB=ON PLU=ON ?GLYCERYL?(1T)ETHER? L163 QUE ABB=ON PLU=ON ?GLYCERYL? (3A) ETHER? OUE ABB=ON PLU=ON POLAR? L164 QUE ABB=ON PLU=ON WATER OR H2O OR AQ OR AQUEOUS? L165 QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR ETHANOL OR ETOH L166

```
L167
               QUE ABB=ON PLU=ON CATION?
L168
               QUE ABB=ON PLU=ON ?POLYACRYLAT? OR (POLY(1W)?ACRYLAT?) OR
               (POLY(1T)?ACRYLAT?)
L169
               QUE ABB=ON PLU=ON ETHOXYL?
               QUE ABB=ON PLU=ON ?GLYCOL?
L170
               QUE ABB=ON PLU=ON ALCOHOL OR ALKANOL OR DIOL OR POLYOL OR
L171
               GLYCOL OR TRIOL
               QUE ABB=ON PLU=ON ?PIGMENT?
L172
               QUE ABB=ON PLU=ON AL OR ALUMINUM OR ALUMINIUM OR ALUMINA OR
L173
               BARIUM OR BA OR CALCIUM OR CA OR IRON OR FE OR FERR? OR
               TITANIUM OR TITANIA OR TITANAT? OR MICA
               QUE ABB=ON PLU=ON COSMETIC? OR BEAUT? OR TOILET? OR HYGIEN?
L174
               QUE ABB=ON PLU=ON MAKEUP OR (MAKE(W)UP)
L175
L176
               QUE ABB=ON PLU=ON ?GLYCERETH?
               QUE ABB=ON PLU=ON COLOR? OR COLOUR?
L177
L178(
         1107) SEA FILE=WPIX ABB=ON PLU=ON R01463/PLE (P)G0362/PLE (P)(H0022
L179
               QUE ABB=ON PLU=ON (A12-V04 OR D08-B OR B14-R? OR C14-R?)/MC
               QUE ABB=ON PLU=ON (B12-L02 OR C12-L02)/MC
L180
               QUE ABB=ON PLU=ON (A61K0008 OR A61Q?)/IPC
L181
             8)SEA FILE=WPIX ABB=ON PLU=ON L178 AND (L158 OR L159 OR L160)
L182(
L183(
         1099)SEA FILE=WPIX ABB=ON PLU=ON L178 NOT L182
          858) SEA FILE=WPIX ABB=ON PLU=ON L183 AND L161
L184(
L185(
          395) SEA FILE-WPIX ABB-ON PLU-ON L184 AND ((?BUTYL?/BIX,BIEX,ABEX,
           23) SEA FILE=WPIX ABB=ON PLU=ON L185 AND (L179 OR L180 OR L181)
L186(
            1) SEA FILE=WPIX ABB=ON PLU=ON L186 AND ((L162 OR L163) OR L176)
L187(
           12) SEA FILE=WPIX ABB=ON PLU=ON L186 AND (L172 OR L173 OR L177)
L188(
            23)SEA FILE=WPIX ABB=ON PLU=ON (L186 OR L187 OR L188)
23)SEA FILE=WPIX ABB=ON PLU=ON L189 AND ((L164 OR L165 OR L166 O
L189(
L190(
            23 SEA ABB=ON PLU=ON (L189 OR L190)
L191
              _____
    FILE 'STNGUIDE' ENTERED AT 08:59:20 ON 14 MAR 2008
    FILE 'ZCAPLUS' ENTERED AT 09:00:22 ON 14 MAR 2008
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(1W)ETHY
L192
               L))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)ACRYL?))
               QUE ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY?(3W)?B
               UTYL?))(3A)?ACRYL?
    FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 09:07:39 ON 14 MAR 2008
           110 SEA ABB=ON PLU=ON L38
L194
L195
             1 SEA ABB=ON PLU=ON L194 AND (L101 OR L102 OR L103)
           109 SEA ABB=ON PLU=ON L194 NOT L195
L196
            94 SEA ABB=ON PLU=ON L196 AND L105
             3 SEA ABB=ON PLU=ON L197 AND L10
L198
               D SCAN
L199
            60 SEA ABB=ON PLU=ON L196 AND L18
L200
             4 SEA ABB=ON PLU=ON L199 AND L181
L201
             7 SEA ABB=ON PLU=ON L198 OR L200
L202
             5 SEA ABB=ON PLU=ON L201 AND L105
    FILE 'STNGUIDE' ENTERED AT 09:10:34 ON 14 MAR 2008
    FILE 'JAPIO' ENTERED AT 09:11:18 ON 14 MAR 2008
L203
            28 SEA ABB=ON PLU=ON ((?HYDROXY?(1T)ETHYL) OR (?HYDROXY?(1W)ETHY
               L))(3A)(?METHACRYL? OR ((METHYL OR ME OR CH3)(2A)ACRYL?))
L204
            96 SEA ABB=ON PLU=ON ((?HYDROXY?(1T)?BUTYL?) OR (?HYDROXY?(3W)?B
               UTYL?))(3A)?ACRYL?
            1 SEA ABB=ON PLU=ON L203 AND L204
L205
               D SCAN
```

```
L206
       O SEA ABB=ON PLU=ON L205 AND (BEKELE OR DECKNER)/AU
L207
            0 SEA ABB=ON PLU=ON L205 AND L103
L208
            0 SEA ABB=ON PLU=ON (L206 OR L207)
            1 SEA ABB=ON PLU=ON L205 NOT L208
L209
            1 SEA ABB=ON PLU=ON L209 AND L105
L210
               D KWIC
    FILE 'STNGUIDE' ENTERED AT 09:13:57 ON 14 MAR 2008
               D QUE L18
    FILE 'REGISTRY' ENTERED AT 09:14:30 ON 14 MAR 2008
            1 SEA ABB=ON PLU=ON 2478-10-6/RN
L211
             1 SEA ABB=ON PLU=ON 868-77-9/RN
L212
    FILE 'STNGUIDE' ENTERED AT 09:15:11 ON 14 MAR 2008
   FILE 'MEDLINE' ENTERED AT 09:16:08 ON 14 MAR 2008
L213
          O SEA ABB=ON PLU=ON L38
             0 SEA ABB=ON PLU=ON L18
L214
          904 SEA ABB=ON PLU=ON L212
L215
L216
             4 SEA ABB=ON PLU=ON L211
             O SEA ABB=ON PLU=ON L215 AND L216
L217
               E POLYMERS/CT
               E E9+ALL
              QUE ABB=ON PLU=ON POLYMERS+PFT, OLD, NEW, NT/CT
L218
               QUE ABB=ON PLU=ON "POLYMETHACRYLIC ACIDS"+PFT,OLD,NEW,NT/CT
L219
L220
           617 SEA ABB=ON PLU=ON ((L215 OR L216) OR (L211 OR L212)) AND
               (L218 OR L219)
               D TRI 1-3
L221
          617 SEA ABB=ON PLU=ON L220 AND (L215 OR L216)
              E COSMETICS/CT
L222
               QUE ABB=ON PLU=ON COSMETICS+PFT, OLD, NEW, NT/CT
            6 SEA ABB=ON PLU=ON L221 AND L222
L223
L224
             O SEA ABB=ON PLU=ON L221 AND L122
            78 SEA ABB=ON PLU=ON L221 AND ((L116 OR L117) OR L123)
L225
              D TRI 1-3
           15 SEA ABB=ON PLU=ON L225 AND (L116 OR L123)
L*** DEL 23031 S L222-L223 OR L226
L227
         21 SEA ABB=ON PLU=ON (L223 OR L224) OR L226
            0 SEA ABB=ON PLU=ON L227 AND (L101 OR L102 OR L103)
21 SEA ABB=ON PLU=ON L227 NOT L228
L228
L229
L230
            11 SEA ABB=ON PLU=ON L229 AND L104
               D TRI 8-11
   FILE 'STNGUIDE' ENTERED AT 09:22:48 ON 14 MAR 2008
    FILE 'EMBASE' ENTERED AT 09:23:10 ON 14 MAR 2008
L231
             0 SEA ABB=ON PLU=ON L38
L232
             0 SEA ABB=ON PLU=ON L18
L233
          993 SEA ABB=ON PLU=ON L212
L234
             0 SEA ABB=ON PLU=ON L211
               E POLYMERS/CT
               E POLYACRYL/CT
               E POLYACRYLAT/CT
               E E84+ALL
L235
              QUE ABB=ON PLU=ON "POLYACRYLIC ACID"+PFT,OLD,NEW,NT/CT
            25 SEA ABB=ON PLU=ON ((L233 OR L234) OR (L192 OR L193)) AND
L236
              L235
              E COSMETIC/CT
               QUE ABB=ON PLU=ON COSMETIC+PFT, OLD, NEW, NT/CT
L237
```

10/824.298

	10/824,298
L238	1 SEA ABB=ON PLU=ON L236 AND (L116 OR L123)
L239	
L240	0 SEA ABB=ON PLU=ON L236 AND (L101 OR L102 OR L103)
L241	25 SEA ABB=ON PLU=ON L236 NOT L240 16 SEA ABB=ON PLU=ON L241 AND L104
	3 SEA ABB=ON PLU=ON L241 AND L104 3 SEA ABB=ON PLU=ON L242 AND (L238 OR L239 OR L240)
12 13	D TRI 1-3
	FILE 'STNGUIDE' ENTERED AT 09:28:33 ON 14 MAR 2008
	FILE 'EMBASE' ENTERED AT 09:29:16 ON 14 MAR 2008
	FILE 'STNGUIDE' ENTERED AT 09:29:29 ON 14 MAR 2008
	FILE 'BIOSIS, CABA, DRUGU, VETU, BIOTECHNO' ENTERED AT 09:30:43 ON 14 MAR 2008
L244	
L245 L246	
L247	3 SEA ABB=ON PLU=ON L211
L248	231 SEA ABB=ON PLU=ON (L244 OR L245 OR L246 OR L247) AND
- 0 . 0	(?POLYMER OR ?POLYMERI?)
	815 SEA ABB=ON PLU=ON L244 OR L245 OR L246 OR L247 346 SEA ABB=ON PLU=ON L249 AND (?POLYMER OR ?POLYMERI?)
	3 SEA ABB=ON PLU=ON L250 AND (L246 OR L192) AND (L247 OR L193)
T 0 E 0	D SCAN 0 SEA ABB=ON PLU=ON L251 AND (L101 OR L102 OR L103)
L252	3 SEA ABB=ON PLU=ON L251 NOT L252
L254	
	FILE 'STNGUIDE' ENTERED AT 09:38:23 ON 14 MAR 2008
	FILE 'PASCAL, APOLLIT, CEABA-VTB, LIFESCI, BIOENG, BIOTECHDS, DRUGB,
	VETB, CABA, KOSMET, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 09:39:38 ON
	14 MAR 2008
	FILE 'REGISTRY' ENTERED AT 09:39:53 ON 14 MAR 2008
	SET SMARTSELECT ON
L255	
	SET SMARTSELECT OFF
	FILE 'PASCAL, APOLLIT, CEABA-VTB, LIFESCI, BIOENG, BIOTECHDS, DRUGB,
	VETB, CABA, KOSMET, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 09:39:54 ON
	14 MAR 2008
L256	10885 SEA ABB=ON PLU=ON L255
	FILE 'REGISTRY' ENTERED AT 09:40:54 ON 14 MAR 2008
	SET SMARTSELECT ON
L257	
	SET SMARTSELECT OFF
	FILE 'PASCAL, APOLLIT, CEABA-VTB, LIFESCI, BIOENG, BIOTECHDS, DRUGB,
	VETB, CABA, KOSMET, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 09:40:55 ON
1050	14 MAR 2008
L258 L259	
L260	
L261	·

L262 57 SEA ABB=ON PLU=ON L261 AND L104

```
L263
             3 SEA ABB=ON PLU=ON L262 AND ((L116 OR L117) OR L123)
               D SCAN
L264
             O SEA ABB=ON PLU=ON L262 AND (L118 OR L119)
L265
             0 SEA ABB=ON PLU=ON L262 AND ((L106 OR L107) OR L122)
             8 SEA ABB=ON PLU=ON L262 AND (L111 OR L112)
L266
            10 SEA ABB=ON PLU=ON L262 AND (L110 OR L115 OR L114)
L267
L268
            19 SEA ABB=ON PLU=ON L263 OR L264 OR L265 OR L266 OR L267
             3 SEA ABB=ON PLU=ON L268 AND (L192/IT,TI,CC,CT,ST,STP OR
L269
               L193/IT, TI, CC, CT, ST, STP)
               D SCAN
L270
             19 SEA ABB=ON PLU=ON L268 OR L269
     FILE 'STNGUIDE' ENTERED AT 10:03:07 ON 14 MAR 2008
               D OUE L152
               D QUE STAT L10
               D QUE STAT L18
               D QUE STAT L22
               D QUE STAT L38
               D QUE NOS L78
               D QUE STAT L152
               D QUE L191
               D QUE NOS L202
               D QUE L210
               D QUE NOS L230
               D QUE NOS L243
               D QUE NOS L254
               D OUE NOS L270
     FILE 'HCAPLUS, WPIX, USPATFULL, USPAT2, JAPIO, MEDLINE, EMBASE, BIOSIS,
     PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS'
     ENTERED AT 10:05:58 ON 14 MAR 2008
L271
             84 DUP REM L152 L191 L202 L210 L230 L243 L254 L270 (11 DUPLICATES
                     ANSWERS '1-30' FROM FILE HCAPLUS
                     ANSWERS '31-51' FROM FILE WPIX
                     ANSWER '52' FROM FILE USPATFULL
                     ANSWER '53' FROM FILE JAPIO
                     ANSWERS '54-64' FROM FILE MEDLINE
                     ANSWERS '65-67' FROM FILE EMBASE
                     ANSWERS '68-70' FROM FILE BIOSIS
                     ANSWERS '71-73' FROM FILE PASCAL
                     ANSWERS '74-75' FROM FILE APOLLIT
                    ANSWER '76' FROM FILE CEABA-VTB
                     ANSWER '77' FROM FILE BIOENG
                     ANSWER '78' FROM FILE BIOTECHDS
                    ANSWERS '79-83' FROM FILE SCISEARCH
                     ANSWER '84' FROM FILE DISSABS
                SAVE TEMP L271 PAG298MAIN/A
     FILE 'STNGUIDE' ENTERED AT 10:06:26 ON 14 MAR 2008
     FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL,
    APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' ENTERED AT
     10:07:13 ON 14 MAR 2008
```

D IBIB ED ABS HITIND HITSTR

FILE 'STNGUIDE' ENTERED AT 10:07:14 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' ENTERED AT 10:07:23 ON 14 MAR 2008

D IBIB ED ABS HITIND HITSTR 2-30

FILE 'STNGUIDE' ENTERED AT 10:07:51 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' ENTERED AT 10:08:41 ON 14 MAR 2008

D IALL ABEQ TECH ABEX 31-51

FILE 'STNGUIDE' ENTERED AT 10:09:57 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' ENTERED AT 10:10:53 ON 14 MAR 2008

D IBIB AB HITSTR 52

FILE 'STNGUIDE' ENTERED AT 10:10:58 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' ENTERED AT 10:11:41 ON 14 MAR 2008

D IBIB ED AB IND 53-75

FILE 'STNGUIDE' ENTERED AT 10:11:45 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' ENTERED AT 10:12:32 ON 14 MAR 2008

D IBIB ED AB IND 76

FILE 'STNGUIDE' ENTERED AT 10:12:32 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL, JAPIO, MEDLINE, EMBASE, BIOSIS, PASCAL, APOLLIT, CEABA-VTB, BIOENG, BIOTECHDS, SCISEARCH, DISSABS' ENTERED AT 10:12:46 ON 14 MAR 2008

D IBIB ED AB IND 77-84

FILE 'STNGUIDE' ENTERED AT 10:12:49 ON 14 MAR 2008

- D QUE NOS L77
- D QUE L157
- D QUE NOS L195
- D QUE L208
- D QUE NOS L228
- D OUE NOS L240
- D QUE NOS L252
- D QUE NOS L260

FILE 'HCAPLUS, WPIX, USPATFULL' ENTERED AT 10:14:53 ON 14 MAR 2008 L272 10 DUP REM L77 L157 L195 L208 L228 L240 L252 L260 (0 DUPLICATES RE

ANSWER '1' FROM FILE HCAPLUS
ANSWERS '2-9' FROM FILE WPIX

ANSWER '10' FROM FILE USPATFULL

SAVE TEMP L272 PAG298INV/A

FILE 'STNGUIDE' ENTERED AT 10:15:14 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL' ENTERED AT 10:15:39 ON 14 MAR 2008
D IBIB ED ABS HITIND HITSTR

FILE 'STNGUIDE' ENTERED AT 10:15:40 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL' ENTERED AT 10:16:23 ON 14 MAR 2008 D IALL ABEQ TECH ABEX 2-9

FILE 'STNGUIDE' ENTERED AT 10:16:44 ON 14 MAR 2008

FILE 'HCAPLUS, WPIX, USPATFULL' ENTERED AT 10:17:34 ON 14 MAR 2008 D IBIB AB HITSTR 10

FILE 'STNGUIDE' ENTERED AT 10:17:35 ON 14 MAR 2008

FILE 'STNGUIDE' ENTERED AT 10:17:44 ON 14 MAR 2008

FILE HOME

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Mar 7, 2008 (20080307/UP).

FILE HCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 14 Mar 2008 VOL 148 ISS 12 FILE LAST UPDATED: 13 Mar 2008 (20080313/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIX

FILE LAST UPDATED: 13 MAR 2008 <20080313/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200818 <200818/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to the end of
November 2007. No update date (UP) has been created for the
reclassified documents, but they can be identified by
20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and
20071130/UPIC. <<</pre>

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://scientific.thomson.com/support/patents/coverage/latestupdates/

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0: http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0710.p

- >>> XML document distribution format now available See HELP XMLDOC <<<
- >>> ECLA Codes and Current US National Classifications have been added see NEWS and HELP CHANGE <<<
- >>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<
- >>> Updated PDF files in the following links:
 http://www.stn-international.de/stndatabases/details/ico_0801.zip
 http://www.stn-international.de/stndatabases/details/epc_0801.zip
 Supplement of all changed ECLA items:
 http://www.stn-international.de/stndatabases/details/ecla_0802s.zip <</pre>

FILE REGISTRY

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 MAR 2008 HIGHEST RN 1007849-81-1 DICTIONARY FILE UPDATES: 13 MAR 2008 HIGHEST RN 1007849-81-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE ZCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS is strictly prohibited.

FILE COVERS 1907 - 14 Mar 2008 VOL 148 ISS 12 FILE LAST UPDATED: 13 Mar 2008 (20080313/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 13 Mar 2008 (20080313/PD) FILE LAST UPDATED: 13 Mar 2008 (20080313/ED) HIGHEST GRANTED PATENT NUMBER: US7343628 HIGHEST APPLICATION PUBLICATION NUMBER: US2008066207

CA INDEXING IS CURRENT THROUGH 13 Mar 2008 (20080313/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 13 Mar 2008 (20080313/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2007 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2007

FILE USPATOLD

FILE COVERS U.S. PATENTS 1790-1975
Produced using data provided by Univentio.

This database was created using Optical Character Recognition (OCR) technology. For this reason, some characters may be missing or mistranslated. In order to improve searchability and retrieval, CA indexing information has been added to the Title, Inventor, and Patent Assignee fields where possible. Please see HELP CASDATA for more information on the availability of CAS indexing in this database.

FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 13 Mar 2008 (20080313/PD)
FILE LAST UPDATED: 13 Mar 2008 (20080313/ED)
HIGHEST GRANTED PATENT NUMBER: US2007132760
HIGHEST APPLICATION PUBLICATION NUMBER: US2008064877
CA INDEXING IS CURRENT THROUGH 13 Mar 2008 (20080313/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 13 Mar 2008 (20080313/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2007
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2007

FILE JAPIO

FILE LAST UPDATED: 3 MAR 2008 <20080303/UP>
FILE COVERS APRIL 1973 TO NOVEMBER 29, 2007

>>> GRAPHIC IMAGES AVAILABLE <<<

FILE MEDLINE

FILE LAST UPDATED: 13 Mar 2008 (20080313/UP). FILE COVERS 1949 TO DATE.

MEDLINE has been updated with the National Library of Medicine's revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE EMBASE

FILE COVERS 1974 TO 13 Mar 2008 (20080313/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Beginning January 2008, Elsevier will no longer provide EMTREE codes as part of the EMTREE thesaurus in EMBASE. Please update your current-awareness alerts (SDIs) if they contain EMTREE codes.

For further assistance, please contact your local helpdesk.

FILE BIOSIS

FILE COVERS 1926 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 12 March 2008 (20080312/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

FILE CABA

FILE COVERS 1973 TO 6 Mar 2008 (20080306/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The CABA file was reloaded 7 December 2003. Enter HELP RLOAD for details.

FILE DRUGU

FILE LAST UPDATED: 3 MAR 2008 <20080303/UP>

>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

FILE VETU

FILE LAST UPDATED: 02 JAN 2002 <20020102/UP>

FILE COVERS 1983-2001

FILE BIOTECHNO

FILE LAST UPDATED: 7 JAN 2004 <20040107/UP>

FILE COVERS 1980 TO 2003.

THIS FILE IS A STATIC FILE WITH NO UPDATES

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN /CT AND BASIC INDEX <<<

FILE PASCAL

FILE LAST UPDATED: 10 MAR 2008 <20080310/UP>

FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <><

FILE APOLLIT

FILE LAST UPDATED: 22 DEC 2005 <20051222/UP>

FILE COVERS 1973 TO 2005

THE APOLLIT FILE IS NO LONGER BEING UPDATED. *****

** USE FILE RAPRA FOR UP-TO-DATE POLYMER INFORMATION **

FILE CEABA-VTB

FILE LAST UPDATED: 22 FEB 2008 <20080222/UP>

FILE COVERS 1966 TO DATE

>>> DECHEMA, the producer of CEABA-VTB is using a new classification

scheme.

The new classification schemes are available as a PDF file and may be downloaded free-of-charge from: http://www.stn-international.de/news/cc-de.pdf

and

http://www.stn-international.de/news/cc-en.pdf <<<

FILE LIFESCI

FILE COVERS 1978 TO 11 Mar 2008 (20080311/ED)

FILE BIOENG

FILE LAST UPDATED: 18 FEB 2008 <20080218/UP>

FILE COVERS 1982 TO DATE

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN THE BASIC INDEX <<<

FILE BIOTECHDS

FILE LAST UPDATED: 4 JAN 2008 <20080104/UP>

FILE COVERS 1982 TO DATE

>>> USE OF THIS FILE IS LIMITED TO BIOTECH SUBSCRIBERS <<<

FILE DRUGB

>>> FILE COVERS 1964 TO 1982 - CLOSED FILE <<<

FILE VETB

FILE LAST UPDATED: 25 SEP 94 <940925/UP>

FILE COVERS 1968-1982

FILE KOSMET

FILE LAST UPDATED: 4 MAR 2008 <20080304/UP>

FILE COVERS 1968 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <><

FILE SCISEARCH

FILE COVERS 1974 TO 13 Mar 2008 (20080313/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE CONFSCI

FILE COVERS 1973 TO 18 Oct 2007 (20071018/ED)

CSA has resumed updates, see NEWS FILE

FILE DISSABS

FILE COVERS 1861 TO 28 FEB 2008 (20080228/ED)

Only fair use as provided by the United States copyright law is permitted. PROQUEST INFORMATION AND LEARNING COMPANY MAKES NO WARRANTY REGARDING THE ACCURACY, COMPLETENESS OR TIMELINESS OF THE LICENSED MATERIALS OR ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND OR LOST PROFITS OR OTHER CLAIMS RELATED TO THE LICENSED MATERIALS OR THEIR USE.

=>